

NO. 6

U. S. BUSINESS ADMINISTRATION LIBRARY

Farmers follow their fibers from fields to mills 65

Simplified determination of yarn diameter in cloth designing . 82

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textile bulletin

MAY • 1955

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LOOM NECESSITIES

Made from the Finest Hickory and Dogwood



Box Fronts

Crank or Pitman Arms

Creel Sticks

Harness Roll Bearings

Jack Sticks

Laysword Reed Caps

Lease Rods

Roving Sticks

Top Clearer Boards

Under Clearer Roll Sticks

Whip Roll Blocks

Whip Roll Shaft Bearings

JACOBS

SOUTHERN
DIVISION
Charlotte, N. C.

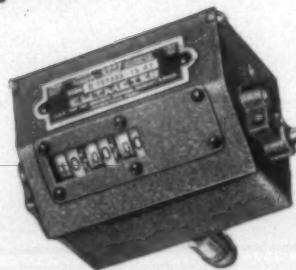
NORTHERN
DIVISION
Danielson, Conn.

In Spinning...

New Veeder-Root 2-3-4 Convertible Hank Counters are easier to read, reset and maintain. And they are built to give you years of accurate facts-in-figures that help toward closer production control.



Weaving...



Here's the combination to count on...on every loom...a Veeder-Root Cut Meter (left) to light a light or stop the loom at a pre-set woven yardage, assuring uniform cuts of cloth...and a new Veeder-Root 2-3-4 Convertible Pick Counter to keep accurate count of loom production on each shift.



Knitting...

For any type of knitting machine, Veeder-Root makes the counters you need to control your production. These new Revolution Counters, with the same advantages as the new 2-3-4 Convertible Hank and Pick Counters, can also be geared to record racks, or racks and tenths. In fact, in any department of any type of textile mill...

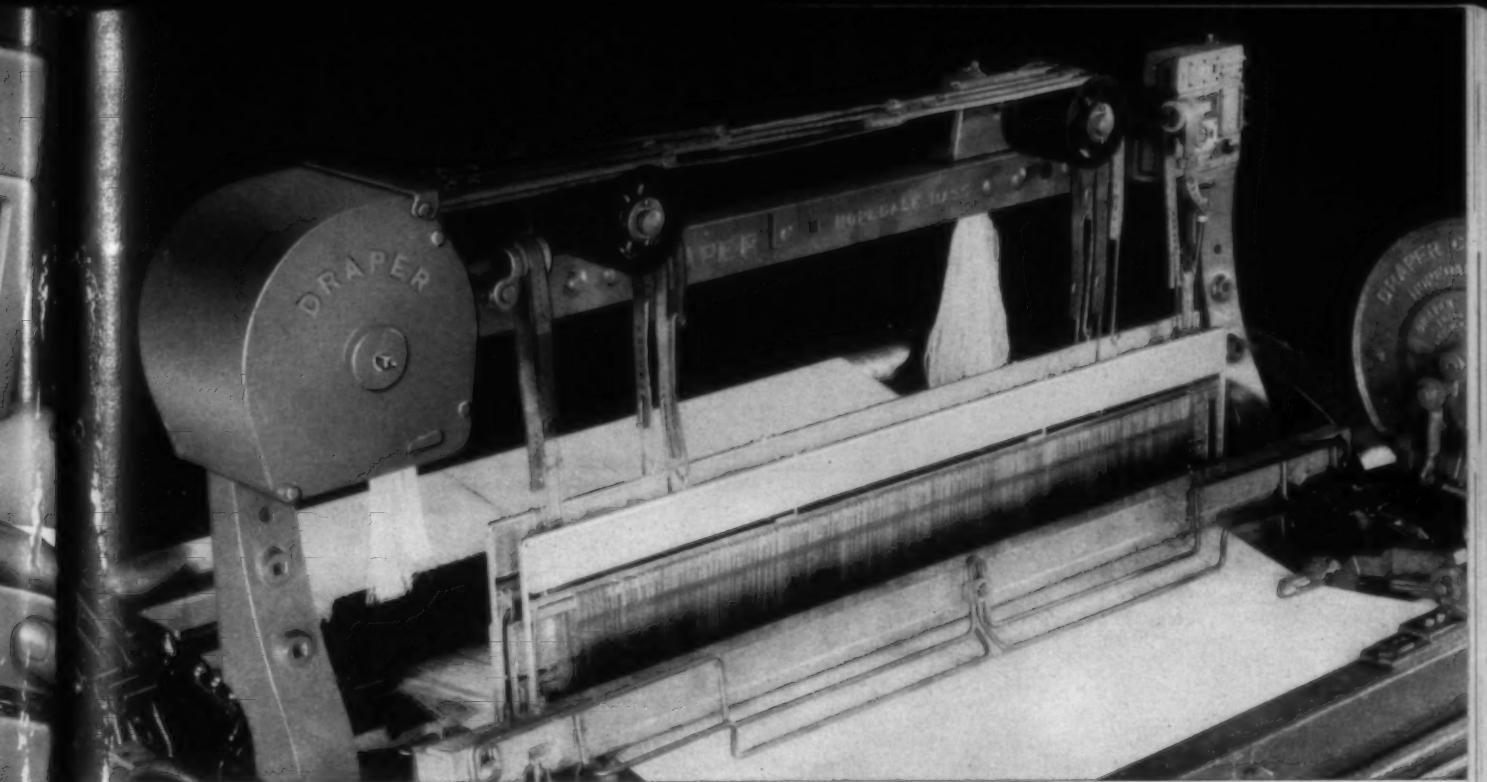


VEEDER-ROOT
IS "THE NAME THAT COUNTS"



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Box 297, Tel. Greenville 3-1371



7 YEARS NO BREAKAGE

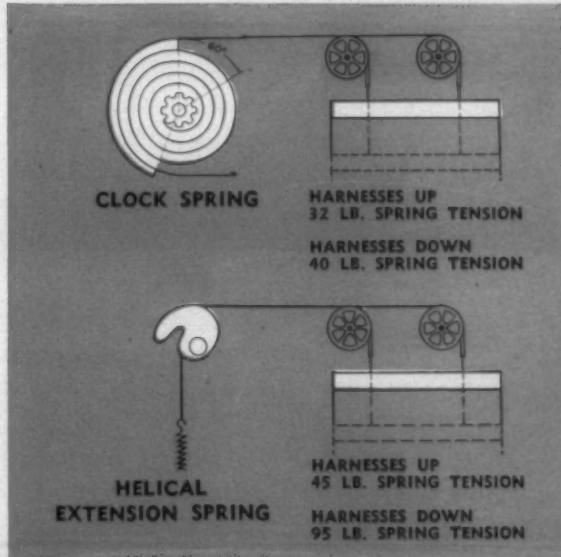
—that's the report, as confirmed by our records, of one Southern mill using Draper Clock Spring Top Motions since 1947.

Practical design and precision manufacturing methods are the reasons why so many mills using Draper Clock Spring Tops* are reporting **little or no spring failure**.

Unlike the Helical Extension Type Spring, the wide flat design of the Clock Spring permits a greater distribution of metal. This makes it possible to keep spring loads within the safe stress range.

The totally enclosed Clock Spring Top Motion with its easy harness action reduces wear on all component parts, increases production and lowers costs.

*Patented



With Clock Spring Top, spring tension increases 8 lbs. or 25%.

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CARD CLOTHING

Trimmed
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The trimming operation in the manufacture of card clothing is a very important one. It must be RIGHT if top quality production is to be attained.

TUFFER Precision Trimming is one of the major reasons why TUFFER Card Clothing fits the cylinders so smoothly and does such a fine job.

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snugly and properly against each other, forming a single unit of clothing that has every point in position . . . and with all the wires having a complete uniformity of height, pitch and angle.

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TUFFER PRODUCTS →

Card Clothing for Woolen, Worsted, Cotton, Asbestos and Silk Cards • Napper Clothing, Brush Clothing, Strickles, Emery Fillets, Top Flats Re-covered and extra sets loaned at all plants. Lickerins and Garnet Cylinders from 4 to 30 inches and Metallic Card Breasts Rewired at Southern Plants • Midgley Patented, and Howard's Special Hand Stripping Cards • Top Flat Chains

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Specifically designed to inactivate CALCIUM and MAGNESIUM PLUS all traces of IRON. In alkaline processing liquors, calcium and iron sequestering is accomplished SIMULTANEOUSLY.

CHEELOX B-14 is the new, all-purpose chelating agent which is soluble and stable at all temperatures in neutral, acid and alkaline solutions. For economical control of metal ions, regardless of the problem, Cheelox B-14 is the product to use.

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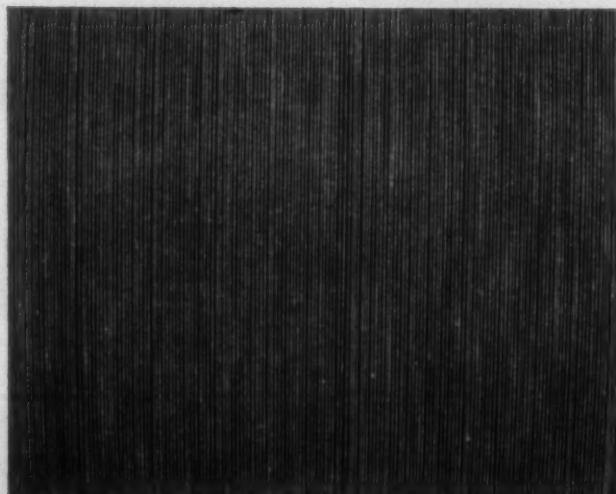
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**WITH OVER 1000 FRAMES OF N/Y ROLLS IN OPERATION,
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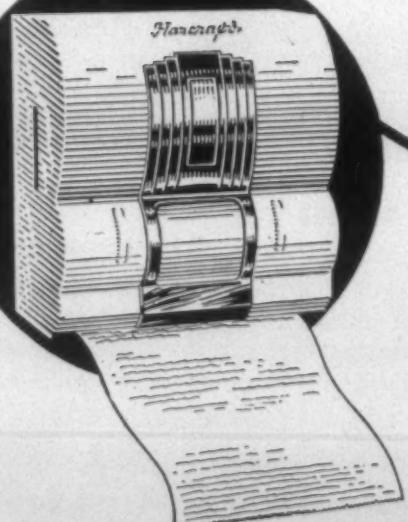
**with these MONEY-SAVING PRODUCTS
From HENLEY**

HARCRAFT PAPER TOWEL DISPENSER

This highly efficient cabinet delivers only one strong, highly absorbent towel at a time with these features —

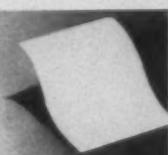
1. Cuts Towel Consumption Up To 46%
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woven plastic (Saran)
Rubber Thread
covering Machines
Vinyl Embossing Calenders
for Plastic Sheeting

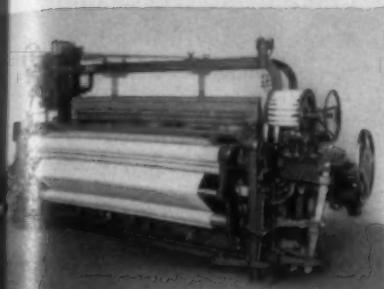
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Shearing Machines)
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Special Drying Machines
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Mullen Testers
Special Rolls
and Machinery
to Customers'
Specifications

B. F. PERKINS & SON, INC.

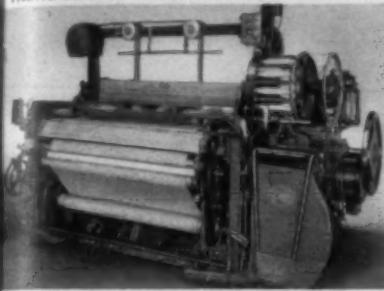
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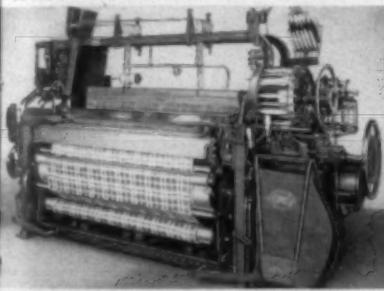
LARGEST MANUFACTURERS OF CALENDER ROLLS IN THE WORLD



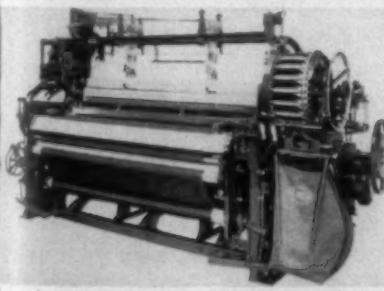
M-P 20 Harness (1/2" space) 2 x 1 box AUTOMATIC FILLING MIXING HEAD LOOM



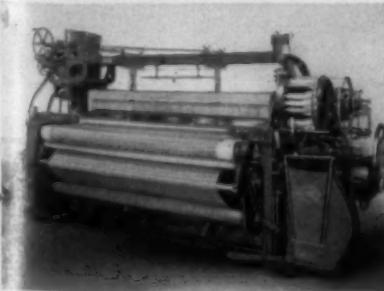
M-P 4 Harness 2 x 1 box AUTOMATIC UNDERCAM LOOM



M-P 20 Harness (15/32" ga.) 4 x 1 box AUTOMATIC DOBBY LOOM



M-P 20 Harness (15/32" ga.) 2 x 1 box AUTOMATIC DOBBY LOOM



M-P 25 Harness (4/10" space) 4 x 1 box AUTOMATIC HEAD LOOM

No. 1472 C

Comprehensive Insurance

NOTICE

THIS POLICY IS MADE AND ISSUED BY THE C&K INSURANCE COMPANY, INC., NEW YORK, NEW YORK, AND IS NOT A CONTRACT OF INSURANCE WITH ANY OTHER COMPANY.

No. 23416 B

M-P CONVERTIBILITY

These are better SOUND POLICIES

It's a good bet that you're adequately covered by insurance on yourself, your house and your property. But what about your weave room?

What sounder business insurance can you take out on your mill than a reasonable program of loom-replacement (each year, 10% of your least efficient looms) with C&K's modern Multi-Purpose Looms . . . both for their immediate benefits . . . and for the even more important protection of convertibility as required to meet future trends in fashion.

And M-P Convertibility means that you can have . . . on the same basic loom-frame . . . a wide choice of letoffs, takeups, shedding mechanisms, feelers . . . as well as lay constructions in an unmatched range from single shuttle, single color to 7 shuttles, 7 colors.

That's why **M-P** means **More Protection** for your **Mill Profits** in the future . . . and why it will pay you to see **C&K** today.



This "Invisible Trademark" Stands Back of the Trademarks of the World's Finest Fabrics . . . which are **WOVEN** Fabrics.

THESE NEW M-P FEATURES CONTRIBUTE → TO THESE PROFIT FACTORS

	Better Quality	Increased Work Assignments	Increased Production (Speed X Efficiency)	Lower Maintenance	Versatility
Rotary Magazine: For single color, or for multiple-color work (up to 4).	✓	✓	✓	✓	✓
Scissors Thread Cutter	✓	✓	✓	✓	✓
Vacuum Filling Control	✓	✓	✓	✓	✓
Cone Picking		✓	✓	✓	✓
More Rugged Basic Frame: Common to all M-P Looms.		✓	✓	✓	✓
Letoffs: New composite type. Also other standard and special types.	✓	✓	✓	✓	✓
Takeups: All purpose, silk, or lower winding roll.	✓			✓	✓
Lay: Precision-built and convertible — 1x1, 2x1, 4x1, 4x2, and 4x4	✓	✓	✓	✓	✓
Shedding Mechanisms: Knowles Head — 25 Harness, 4/10" Space Knowles Head — 20 Harness, 1/2" Space Jacquard Undercam Jacquard	✓	✓	✓	✓	✓
Feelers: As required.	✓	✓	✓	✓	✓
Driving & Shipping	✓	✓	✓	✓	✓

PRECISION, STRENGTH, SIMPLICITY Throughout Every M-P Loom

Crompton & Knowles LOOM WORKS

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Crompton & Knowles of Canada Limited, Montreal, Quebec

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to serve the South BETTER!

Established to provide prompt service and quick delivery of Whitin Engineered Repair Parts to Southern Mills, the large, modern, fully equipped Charlotte Plant of the Whitin Machine Works offers every Southern mill man the opportunity to secure the repair parts he needs, many of them directly from stock.

A large stock supply of the following are available:

BOLSTERS—spinning and roving

GEARS—especially for spinning and roving

CAMS—many standard types

STEEL ROLLS—available on loan while mill rolls being changed to double screw necks.

Flyers available on loan during repair period.

Many other services available including:

SPINDLES—repairs of all kinds, new

CYLINDERS—repaired and new

SCREENS—card, picker

CHANGEOVERS—Super-Draft, band-to-tape and increased traverse

Call now — Charlotte, Franklin 6-5511

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Whitin MACHINE WORKS

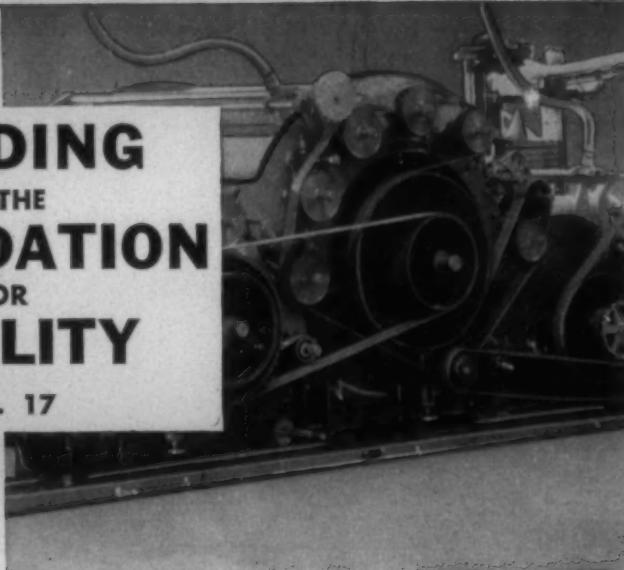
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CARDING IS THE FOUNDATION FOR QUALITY

NO. 17



Additional Tips on Reducing Card Sliver Variation

In the May, 1954, issue of TEXTILE INDUSTRIES, under Tip No. 5, the above subject covered such features as: checking of all plates, feed roll shafts, mote knives, lickerins, gearing, calender rolls, screens, doffers, card clothing, etc.; elimination of irregularities; setting to gauge all points on entire card. Additional copies of this previous page will be supplied free of charge on request to ASHWORTH BROS., INC., Fall River, Mass. The following is a continuation of this subject.

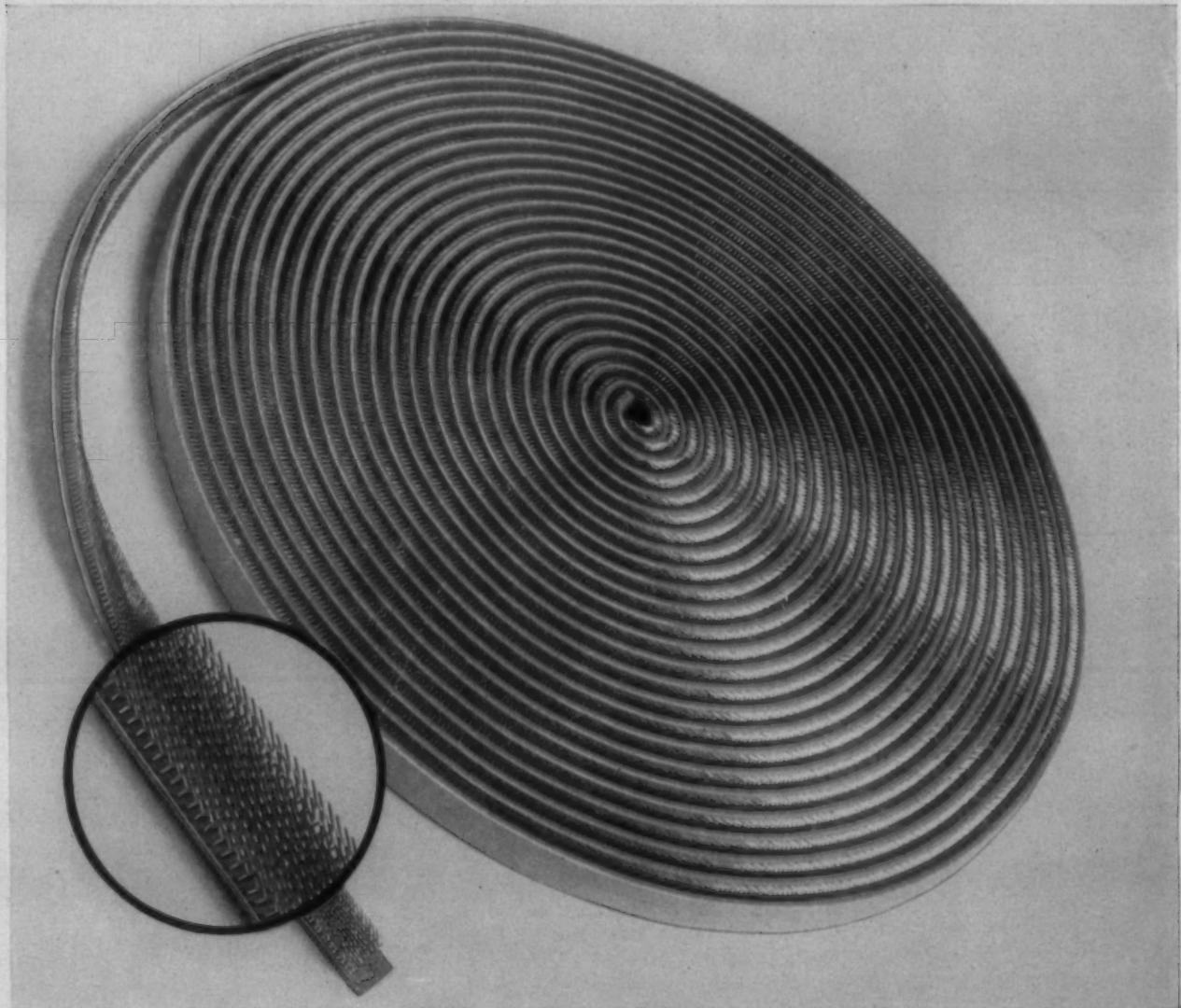
1. Pressure cannot be applied evenly across the width of the lap when feed roll bearings and shafts are worn. To prevent plucking and jerking in of thin places in the lap, be sure all feed roll shafts and bearings are full size. You will benefit, not only from a more even sliver but also from eliminating bruises or jams on your cylinder clothing.
2. Cylinder fillets that are dull load very quickly and tend to roll the stock, thus affecting evenness of sliver. Fillets that are loose on the cylinder tend to have the same effect.

3. Improperly ground flats may affect sliver evenness. Guard against "wedge" ground flats, i.e., long wire on one end, short on opposite end. Be particular about the heel and toe arrangement, as the carding action of the flats can be quickly ruined when the wire is ground away on the heel.
4. Strip on regular schedule. Any variation in the stripping cycle will affect sliver uniformity.
5. Piecing up the end too soon after stripping affects uniformity.
6. Too much tension between the lap roll and feed roll is another source of non-uniformity.
7. Improper contact between top calender rolls in coiler head will affect uniformity.
8. Too much tension between the doffer comb and coiler head will stretch the stock.
9. A lickerin with bruised teeth causes variation in delivery of stock to cylinder. A lickerin with low places, or a high-sided lickerin, also causes uneven delivery at the cylinder, all of which affects sliver uniformity.

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please turn the page ♦

Ashworth
NAPPER CLOTHING and BRUSHES
Made by Pioneers in the Field



We were among the first to manufacture napper clothing and brushes in the United States and now carry in stock standard types for prompt delivery. We also furnish special constructions to order.

Our long experience in this field and practical napper men on our staff enable us to intelligently analyze your napper problems and to make sound recommendations as to type of clothing needed — for wool, cotton, silk or man-made fibres.

Write to our nearest plant and tell us your problem or state your requirements.

ASHWORTH BROS., INC.

American Card Clothing Co. (Woolen Division)

Fall River*†‡ Worcester‡ Philadelphia*†‡ Atlanta†‡
Greenville*†‡ Charlotte†‡ Dallas†‡ (Textile Supply Co.)

*Factory †Repair Shop ‡Distributing Point

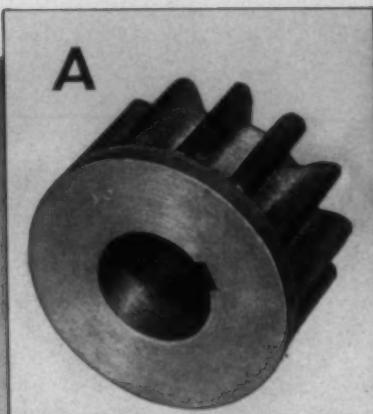
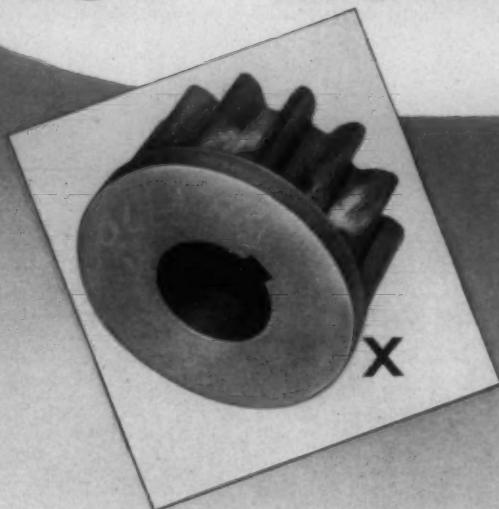
Western Sales Representative, E. G. Paules & Co., Los Angeles, Calif.

3 Factories — 6 Repair Shops — 7 Distributing Points



A TRUE STORY—NO. 1 OF A SERIES

WHICH IS THE BEST "MONEY VALUE"?



FIRST COST IS A LONG WAY FROM FINAL COST!

LET'S
EXAMINE
THE FACTS

Gear X, while costing considerably less than Gear A, is intended to do the same job in a Saco-Lowell 90 Pattern Picker. They are the Drop Shaft Gears designed to drive the entire calender section of the picker. This gear takes the entire load under shock when starting a new lap.

NOW, LET'S EXAMINE THE GEARS !

Gear X is a very cheap imitation of the original part. It is nothing more than gray cast iron with a Brinell Hardness of 170. Saco-Lowell Gear A is made from the original design, using the proper pattern and made of Malleable Cast Iron with a Brinell Hardness of 100. It should be pointed out that a higher Brinell denotes a more brittle, easily broken casting.

IN USE, WHAT HAPPENS ?

Remember, the 13 tooth drop shaft gear is in motion at all times and is jammed into mesh with the 80 tooth gear to drive the entire calender section. Gear X cannot possibly withstand the shock and impact of meshing and will soon chip and knock out teeth. Gear A, being made of malleable iron, will stand up under this shock load. Also, malleable iron will mold itself to match the driving gear, and this prevents wearing out the expensive 80 tooth gear. Malleable Gear A is a genuine Saco-Lowell part, a fitting reminder that the initial cost is not the important factor in the long run.

IT PAYS TO USE GENUINE SACO-LOWELL REPAIR PARTS — THEY'RE GUARANTEED.



SACO-LOWELL

60 BATTERYMARCH STREET, BOSTON 10, MASS.

Shops at BIDDEFORD and SACO, MAINE, and SANFORD, N. C.

SALES OFFICES: CHARLOTTE • GREENSBORO • GREENVILLE • ATLANTA



This new Robbinette* Ring has a finish which is the result of many years of cooperative research between Saco-Lowell technicians and the steel manufacturing industry. Testing and trial run reports show that its all-around performance is far superior to that of any other spinning ring.

This Saco-Lowell Robbinette* Ring is suitable for

cotton, wool, paper, glass and all synthetic fibers and blends. Robbinette* Rings break in rapidly and easily — and once in operation, they increase the life of the traveler and decrease the number of ends down per MSH.

Robbinette* Finish is now standard on all of our rings for both spinning and twisting without extra cost.

*A product of the Pawtucket Spinning Ring Company, the Ring Department of Saco-Lowell Shops.



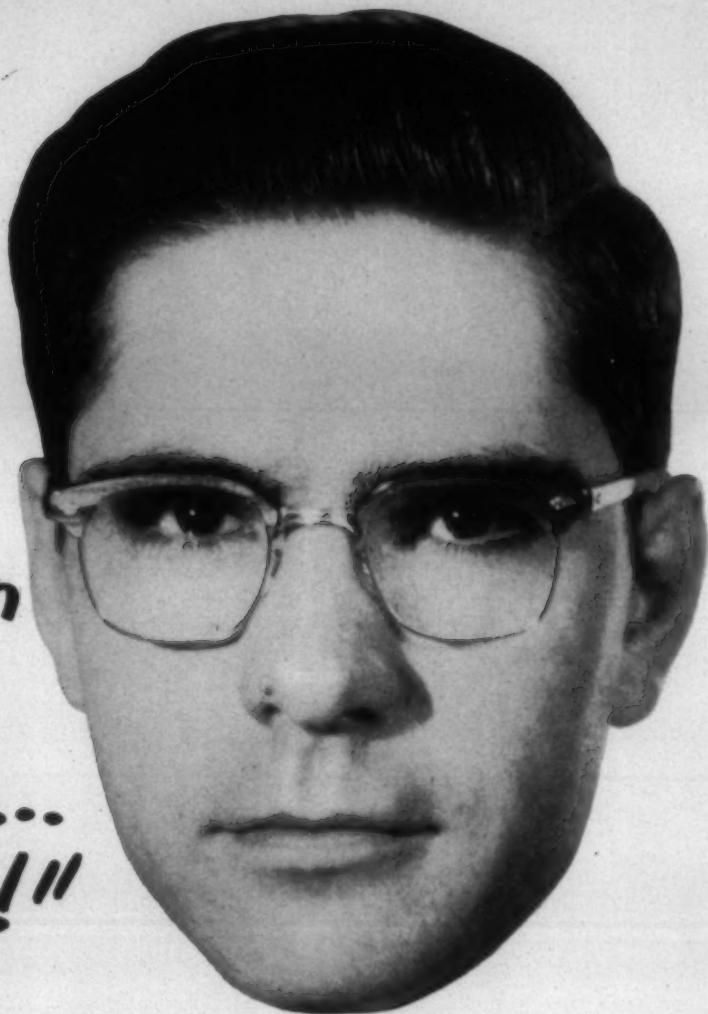
SACO-LOWELL
60 BATTERYMARCH STREET, BOSTON 10, MASS.

Shops at BIDDEFORD and SACO, MAINE; and SANFORD, N. C.

SALES OFFICES: CHARLOTTE • GREENSBORO • GREENVILLE • ATLANTA



**"One suggestion
cut 'Seconds'
to a minimum ...
... costs by $\frac{1}{3}$!"**



A large South Carolina textile mill ran into lubrication trouble in its weave room—a high rate of cloth spoilage caused by leaking oil. The mill superintendent asked Sinclair Representative W. D. Cawley for his recommendations.

Oil dripped from bearings

Mr. Cawley reports: "The competitive oil being used in their looms was dripping from bearings onto the cloth and the floors. I suggested Sinclair NO-DRIP #15 because it combines a quality base oil for outstanding lubrication, together with a special soap thickening agent that resists leakage and throw-off."

Problem solved—lubrication costs cut...

"Since this mill has been using Sinclair NO-DRIP #15, seconds due to cloth spoilage have been cut to a minimum. What's more, lubrication costs have been cut by one-third!"

Why not let a Sinclair Lubrication Engineer help solve your lubrication problem. *There's no obligation.* Contact your local Sinclair office or write Sinclair Refining Company, Technical Service Division, 600 Fifth Avenue, New York 20, N.Y.

SINCLAIR LUBRICANTS



A Quality-Boosting Installation. In the Thornton, R. I., mill of the Walter Marshall Spinning Corporation of Rhode Island, these Leesona Model 10 Ring Twisters have brought

improved yarn quality and production efficiency. So much so that this mill is engaged in 100% replacement of twisting equipment with Model 10's.

Worsted Yarn Mill Boosts Quality

Walter Marshall Spinning Corporation tops its own high quality standards, realizes new economies with Leesona Model 10 Ring Twister

For improved Worsted Yarn Twisting, the Walter Marshall Spinning Corporation installed Leesona Model 10 Ring Twisters as part of a modernization program. The resulting benefits were immediate and outstanding. Here is what the management at the Walter Marshall Mill has to say:

"Primarily, we were interested in getting highest possible yarn quality when we replaced our obsolete equipment with Leesona Model 10 Ring Twisters. We got that top quality in full measure.

"Such features as automatic stop motion, free

delivery, constant yarn speed delivered by accurate feed rolls and tensioning are real quality boosters. So is the endless belt drive, which produces even yarn on all spindles."

In your own operations

modernizing with Leesona twisting or winding machines is the logical way to make your machine replacement be a real time and money saver, while improving quality. For further facts on the Model 10 Ring Twister, or on any other Leesona machine, see your Universal representative.

23.4.9



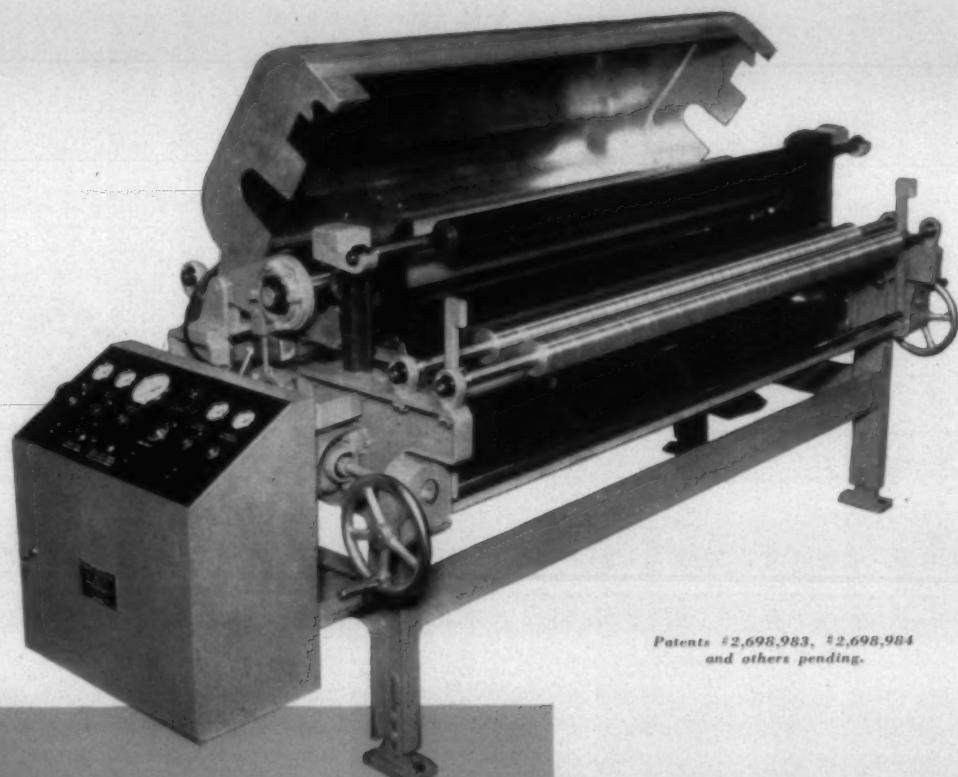
UNIVERSAL WINDING COMPANY

P. O. BOX 1605, PROVIDENCE 1, R. I.

Sales Offices: Boston • Philadelphia • Utica • Charlotte • Atlanta • Los Angeles

Winding and Twisting Machinery for Natural and Synthetic Yarns

40,000 LOOMS WORK THE GRIFFIN WAY!



Patents #2,698,983, #2,698,984
and others pending.

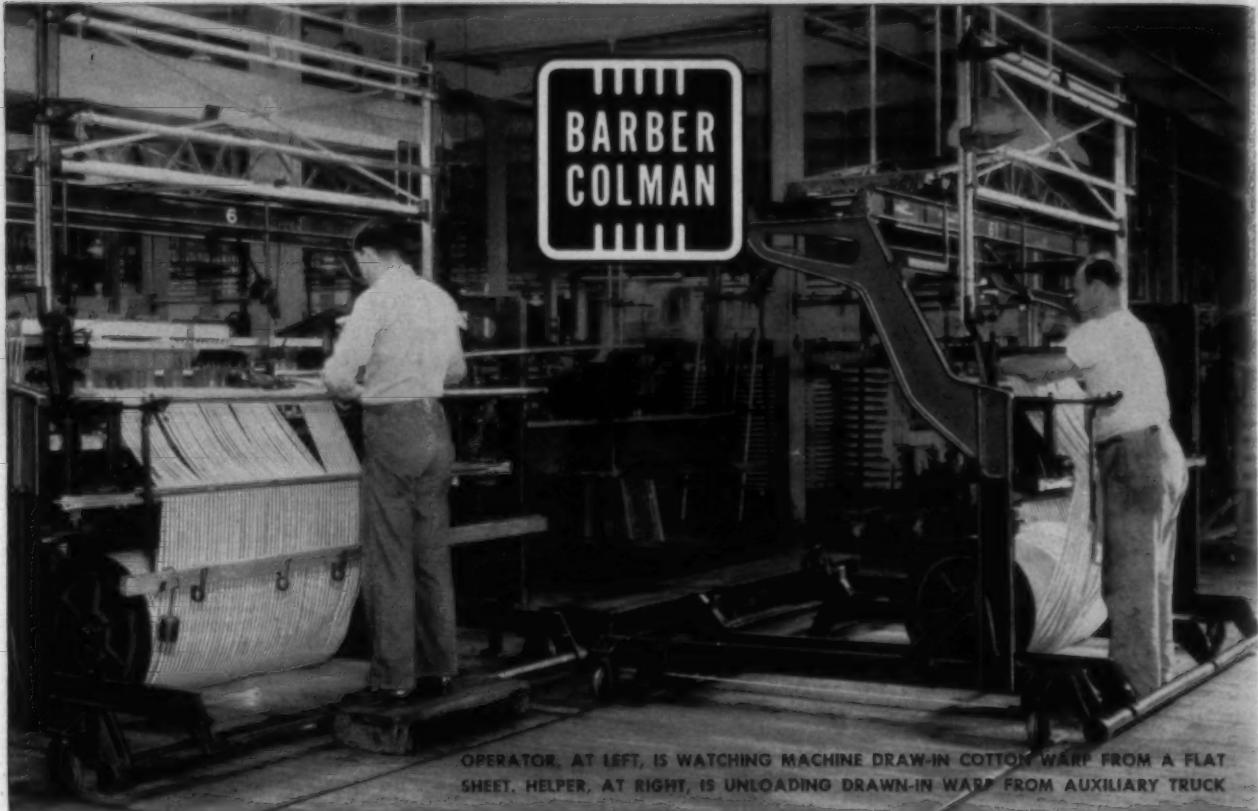
40,000 looms now have their warps sized "under cover"
on the Griffin Size Applicators.

These 40,000 looms
WEAVE MORE YARDS USE LESS SIZE
MAKE BEST CLOTH HAVE LOWEST COST

Give your looms the benefit of
"OPERATION UNDER COVER"

Write for further information and details:

IRA L. GRIFFIN & SONS
P. O. BOX 1576 CHARLOTTE, N. C.



OPERATOR, AT LEFT, IS WATCHING MACHINE DRAW-IN COTTON WARP FROM A FLAT SHEET. HELPER, AT RIGHT, IS UNLOADING DRAWN-IN WARP FROM AUXILIARY TRUCK

A MACHINE WITH SHARP EYES, QUICK HANDS, AND AN AUTOMATIC "BRAIN"...



If you want to see the complete list of mills now using these machines, and the types of products they weave, write for a copy of the "Users List" shown above. Ask for Bulletin F 6354. It is available also in French and German translations.

The operation of drawing-in new warp through drop wires, heddles, and reed is an ever-present problem in all types of weaving. In the old days it was done entirely by hand, and still is in some places — a tedious and tiresome task. The advent of the Barber-Colman Warp Drawing Machines has changed all that, so that you now have a wide range of equipment to suit all needs. Barber-Colman Warp Drawing Machines draw-in the drop wires, the heddles, and the reed *all in one operation*. A needle, operating at 75 strokes a minute or better, picks up each end in sequence and draws it through the proper apertures. Each opening is correctly presented at each stroke of the needle, this selection being

accomplished automatically from a metal pattern strip punched in accordance with the designer's draft. Thus the human eyes, hands, and brain have been supplanted by a mechanism that is sharper of vision, quicker of movement, and practically infallible. Results, in mills across the country, and in lands across the sea, show a consistent record of improvements and economies of many kinds. Application is not limited to only the larger mills; it is determined actually by the work to be done. Barber-Colman representatives are qualified by long experience to make a detailed study of your requirements—and to make a proper recommendation if one is justified. Ask your Barber-Colman representative for details.

AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • WARP DRAWING MACHINES

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in this corner

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and

You save on handling costs, too. Nacconol SL, being a liquid concentrate, is easy and clean to handle, requires no dissolving. You simply add water to get the desired working concentration. For complete technical data, send for Bulletin #326.

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a handy coupon that will bring you a free sample of Nacconol SL so you can see for yourself how remarkable Nacconol SL really is.

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15/3 is another example of how Chemstrand research and development are contributing new and improved nylon yarns to the textile industry. Prove this for yourself.

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TEXTILE BULLETIN • May 1955

THE BEST

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VAT DYES

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What is the Meaning of MICROFINED?

(over)

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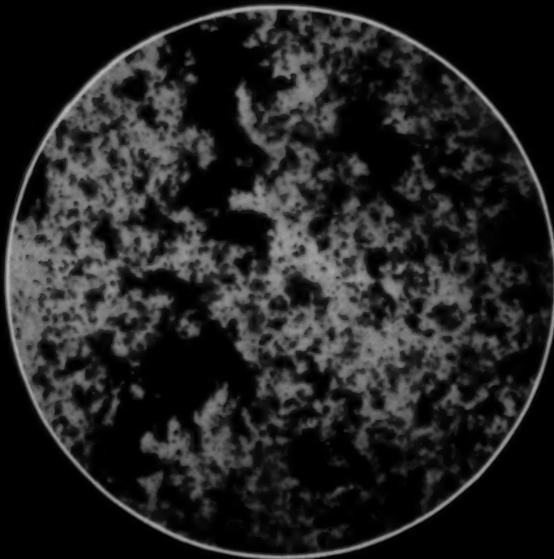
MICROFINED?

The trade-mark MICROFINED has been established to describe the unique characteristics, such as superfine and uniform particle size and perfection of dispersion, that are imparted to CIBANONE® vat dyes by the original and exclusive CIBA manufacturing processes.

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...and come up against a brick wall because an idea for a new product, or product improvement was impossible to achieve? Now, working with the seven distinctive features of the NEW Nylon Staple, the chances are that this dream of a product can come true.

For this is an entirely new kind of Nylon Staple...it's a stiffer fiber, with a brighter-than-bright luster that creates sheen without shine...a new crimp that comes up with new and better effects...it dyes quicker, deeper, with greater economy. You can get new resistance to abrasion with it, better spring-back, new strength with finer yarns.

And you can expect the NEW Nylon Staple by IRC to give you the same cost-cutting uniformity and performance that industry has come to expect of IRC rayon yarns.

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**will put new life in a product...
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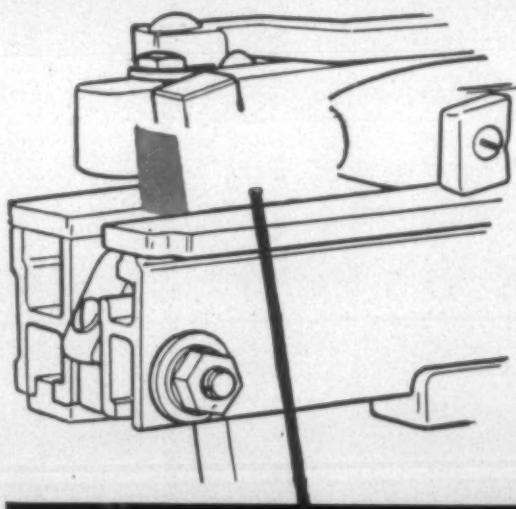
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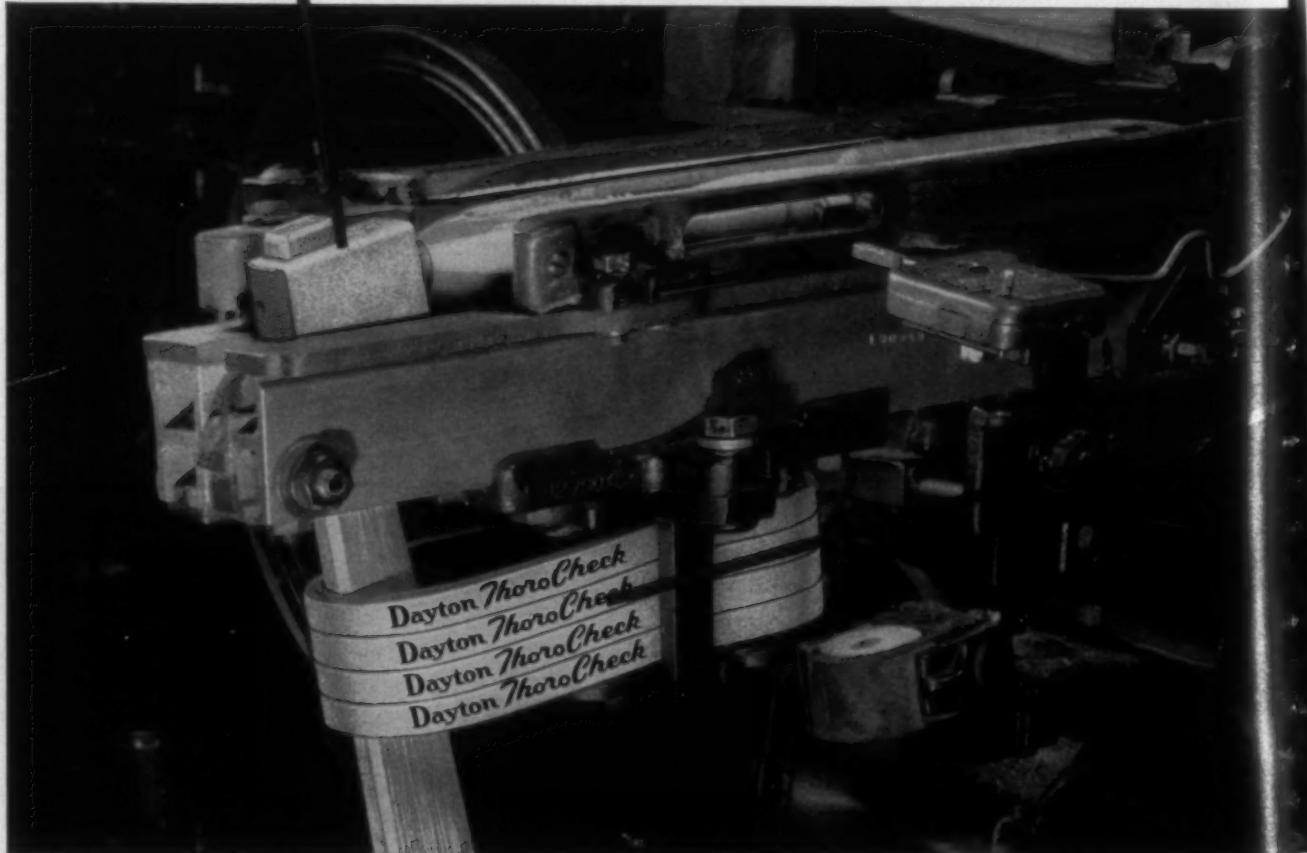
Mill-Proved Dayton Thorobred Loop Pickers and Dayton ThoroCheck Endless Check Straps are performing longer, increasing production and reducing maintenance cost on high speed looms everywhere.



Until you've used Dayton Thorobred Loop Pickers, you've no idea how much more efficient, economical and productive your looms can be. Proof of this is reflected in reports from leading mills . . . "picker costs cut by as much as 50%" . . . "production substantially up" . . . "quality materially improved!"

Made of the highest quality rubber and specially woven fabric, Dayton Pickers have the cushion, strength and durability to withstand the terrific poundings of high speed shuttles for double service life. And they give perfect shuttle contact because the picker stick hole is slightly tilted to insure exact fit on the stick. Dayton's keep their shape and jerked-in fillings are practically eliminated.

Too, Dayton Pickers have a flared bottom at the tapered hole for easy, accurate seating on the stick without tearing the loop ply.



25 to 50 Percent

with these *Thorobreds* by Dayton

Built in one piece, there's nothing to break or expand when Dayton's are driven onto the stick.

Dayton's special, precision process of molding fabric and rubber practically eliminates exterior roughness, leaving sides smooth and corners rounded, thus preventing hanging filling and lint pick-up. Dayton's are *always* uniform in size and a narrow back eliminates wear on lay end strap.

Economy . . . is one big reason why more and more mills are equipping their looms with Dayton ThoroCheck Endless Check Straps. They're saving a healthy 25% to 50% in strap costs alone after converting to Dayton's—more in time, labor and maintenance! That's because these revolutionary Dayton Endless Check Straps outperform and outlast all other straps in actual mill applications!

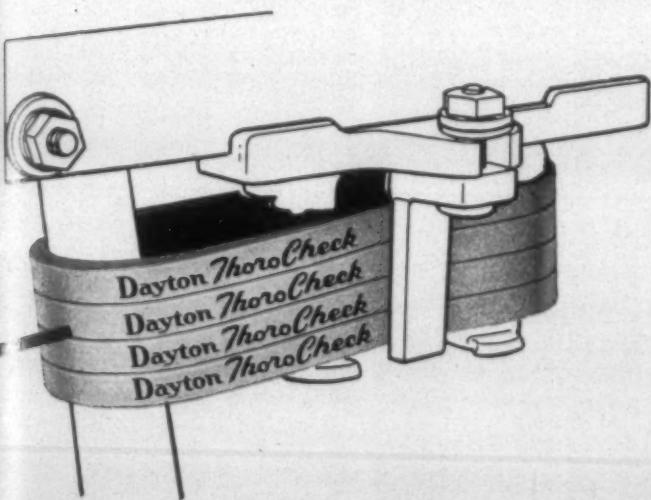
Proof of this: A large southern mill installed them on their X-2 looms. After running Dayton's on a 5 day a week, round-the-clock operation for more than 2400 hours, they found no signs of wear and no adjustment was

needed . . . and the Dayton's are still good for many more months of efficient, economical service. By comparison, other check straps lasted only half as long.

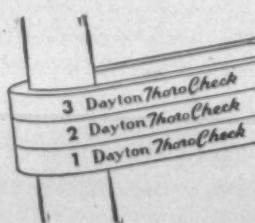
A few of the reasons for such amazing performance are: Dayton ThoroChecks are specially designed and built for safe checking. They eliminate drag over the stick, stop it with a graduated braking action (see diagram), and perform efficiently at the highest speeds.

You get fast, efficient Monday morning starts, too, with Dayton's because they're not affected by temperature or humidity. There's no "growing" or elongation, little or no adjustment needed. And, when replacement does become necessary, they may be replaced singly or in sets.

Besides the lower maintenance cost and reduced downtime, you'll get higher production in your weaving operation with Dayton ThoroCheck Endless Check Straps. Make a personal test today. For complete profit-making details write to Dayton Rubber Co., Textile Div., Dept. 304, 401 S. Carolina National Bank Bldg., Greenville, S. C.



Schematic drawing shows how Dayton ThoroChecks snub picker stick to smooth stop. Number 3 strap takes hold first when stick moves in opposite direction, thus providing smoother checking and greater picker stick, check strap and shuttle life.



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GOLDEN JUBILEE
Dayton 50 **Rubber**
YEARS OF PROGRESS

DAYCO AND DAYTON THOROBRED TEXTILE PRODUCTS FOR BETTER SPINNING AND WEAVING



WATCHING WASHINGTON

[Exclusive and Timely News from the Nation's Capital]

The Administration does not feel that it won a victory or sustained a defeat in the reciprocal trade bill as passed by Congress. The Senate made short work of it by rejecting amendments, including one to limit oil imports, and then passing the bill virtually as reported by the Senate Finance Committee, 75 to 13. The President had to accept restrictions on his rate-cutting powers.

As it goes to the President, the tariff bill gives special protection to the textile and chemical industries through limits on Japanese imports. It also affords protection for oil and other commodity groups through power given to the President to fix quotas on imports which threaten domestic industry deemed vital to national security. The President promised to make liberal use of his quota-fixing power.

Merger of A.F.L. and C.I.O. is to be followed by a new crusade over the country to extend union influence. An "organizing" war chest of \$25 million is being raised. The unions' leaders hope to put aside internal feuding, and gain stronger bargaining positions through unity. President Meany said the new drive "would be without the complicating factors of union rivalries in the past."

Real significance of the merger is that the unions are expanding in the area of politics and government on the largest scale they have attempted. They are definitely seeking greater influence in government, and propose intensified activity in legislation and political campaigns. Some observers view the merger as more political than anything else.

Business groups see the merger as a tightening monopoly on the right to work, and are calling for more curbs on the power of organized labor. The unions are fighting back, not only to prevent new curbs, but to wipe out restrictive legislation on federal and state statute books. One aim of the merger is frankly to require every worker to belong to a union in order to work.

The unions are not aiming at greater stability in their bargaining relations unless through gains in increased political power. A prime objective is to prevent passage of more "right-to-work" laws, and gain repeal of those in effect now. A notable aspect in the matter is that rank-and-file workers are demanding "right-to-work" laws in growing number.

Walter Reuther assailed Clare Hoffman (R., Mich.) for asserting on the House floor that an urban-labor alliance was trying to "ram rigid supports through Congress." Hoffman said this type of alliance would give Reuther "complete domination" of the Democratic Party, and tighten the grip on A.D.A. Reuther did not deny he expects all farm district members to vote later for a higher minimum wage.

The President said the program of flexible price supports, adopted last year, cannot go into effect until after this year's harvests. He said there has not been opportunity to test the effectiveness of the new plan.

Costs of storing farm surplus commodities will climb to \$1 million a day in June, said Agriculture Secretary Benson. The harvest ahead promises to



"You say that's a sample from Dillard! Well, boy, that's worth looking at!"

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1926

"IF IT'S PAPER"

1955

WATCHING WASHINGTON

increase the total investment in surpluses to \$10 billion. All of the daily outpouring for rental, he said, is being paid to commercial warehousemen, of which there are about 15,000. Very little rental money is paid to farmers.

With pension and welfare funds attaining their present size, some union officials think federal oversight is essential to safety. C.I.O. has gone on record as favoring full public disclosure of all welfare fund details as a means of checking abuses. They want disclosure compelled by federal law, with non-compliance punishable by imprisonment up to one year, and fines up to \$10,000.

A.F.L. officials say they agree in principle with the position taken by C.I.O. board for public disclosure of fund details. In doing so they go on record for the first time as favoring new laws to regulate some of their own functions. They would limit disclosure, however to union members concerned, and to certain government agencies. They also favor supplementary state legislation.

Union leaders are privately indicating they have little desire to become capitalists in handling their pension and welfare wealth. While they are buying bank stocks, they deny they wish to become bankers, and that they are not dabbling in the stock market in buying and selling stocks. Some of them say they are investing only in government bonds.

It is quite evident the union leaders do not feel the danger of tight pension and welfare regulatory legislation is past. Some of them deplore the action of the teamsters' union in buying stocks in the midst of a hot proxy battle, even when able to gain a national contract with the company as a result. They say "financial coups" should be left to others.

Union leaders realize they are still in a tight spot in the issue of pension and welfare regulations, with their own members demanding action. While they have succeeded in putting proposed action by Congress behind a political eight-ball in the House, they have not stilled the demand for legislative action. Opinion is growing in Congress that unions should not have seats on both sides of the bargaining table through stock ownership.

While the coal business is described as in deep depression, the union of John L. Lewis continues to be the wealthiest in the country. Its central treasury has \$42 million and its welfare fund \$100 million, compared with \$35 million by the teamsters, \$16 million by the carpenters, \$20 million by the auto workers, \$18 million by the steel workers, and \$12 million by the machinists' union. In addition a special \$25 million "organizing" war chest is being built up.

John L. Lewis has not made a commitment in respect to the new giant in the labor field. He has not been asked to join the merger, and is not expected to join or to cease extending the power of his own catch-all District 50. He is handicapped now in failure to find a competent successor to himself as he comes to the age when he must retire.

Unfair labor practice complaints filed with N.L.R.B. are rising in volume again, being lodged against both unions and employers. The significant feature is that individual workers are filing a larger volume of complaints against unions, running now at a current rate of 1,550 a year.

Left wing and Socialist sniping at Southern Democrats has cut deep into party harmony in this session of Congress. The threat to try to bar from convention seats the Southerners who refused to accept Stevenson in 1952 has aroused the old animosities of the Truman era. Those especially mentioned for a "purge" are Governor Shivers of Texas, and former Governors Kennon of Louisiana and Byrnes of South Carolina. While Senator Byrd was not mentioned by name, it is understood he is included, too.

Now is the time to consider how you can
spruce up your **back to school wear** with new



As Arnel begins to go places, A.A.P. proudly presents its new **LENRA DYES**, a selected group of disperse type colors designed to help you make the most of the outstanding properties of this exciting new fiber. To start off right with Arnel, start with the research-proved colors which help keep Arnel washable and are stable to the heat setting conditions which make Arnel wrinkle-resistant and glaze-resistant.

Intensive tests by the A.A.P. research laboratory have demonstrated the all-around suitability of **LENRA** colors for the dyeing and printing of Arnel. Available in a wide range of brilliant and beautiful shades, the **LENRA** group offers excellent fastness to washing...light...and sublimation.

Many of the **LENRA** colors are presently being used satisfactorily by Celanese Corp. of America, the makers of Arnel Triacetate fiber.

For full details and working samples, consult our nearest branch. An informative A.A.P. manual on the dyeing of Arnel is available. We invite you to request a copy now.

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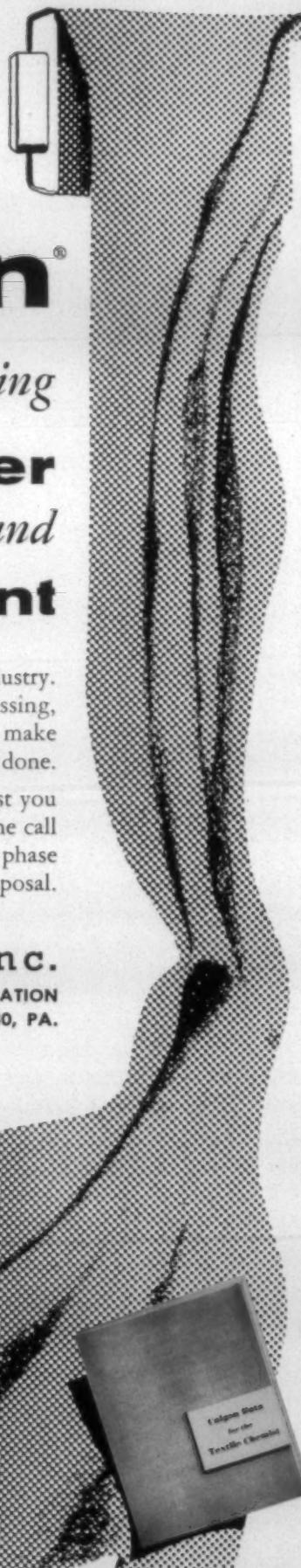
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Screen Gum W-1141-B

Used as thickener for Rapidogen and Indigosol type dyestuffs. Good color value; excellent mark and washes easily.

the textile industry's best source, the country's largest importer and exporter of gums. Jacques Wolf products and services can surely be adapted to your operation—to improve your processing techniques, reduce costs, or actually give you a great variety of unseen benefits.

For test samples and additional information without obligation, write:

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For application and discharge printing of vat colors. Has necessary balance of sulphoxylates, carbonates and hygroscopic agents plus converted thickeners to assure high color value.

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- ★ in peroxide bleaching operation!
- ★ in mercerizing!
- ★ for removing iron stains!
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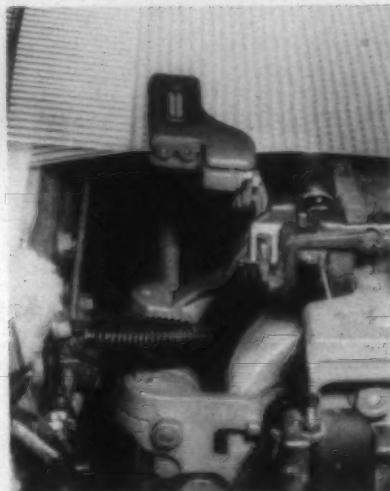


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COST-CONSCIOUS TEXTILE MEN!

For the Textile Industry's Use

- NEW MACHINERY, EQUIPMENT AND SUPPLIES -

Draper Underslung Temple



Underslung temple needs no lubrication
(Draper Corp.)

Draper Corp. has developed a new underslung temple, the design of which is said to completely eliminate the chance of oil, rust or dirt getting on the cloth from the temple. Draper reports that no lubrication is necessary, and that temples will not wear out of line. These features are made possible by the use of torsional rubber bearings mounting the temples on shafts below the cloth. The new scissors-type thread cutter, included in this assembly, permits the filling to be cut closer to the selvage, it is said, thus reducing the danger of drags. The underslung temple is currently available for Draper XD Model looms equipped with center fork filling motion.

(Request Item No. E-1)

ANGLgears

Three-horsepower right-angle bevel gears and 2-to-1 ratio units have been added to the industrial line of ANGLgears produced by Airborne Accessories Corp. ANGLgear Models R-340 and R-350 have been up-rated from $2\frac{1}{2}$ to 3 h.p. The 2:1 ratio gears are now furnished in all sizes and models of the line. The complete ANGLgear line for industrial applications now includes both 1:1 and 2:1 gears in $1\frac{1}{3}$, 1 and 3 h.p. units. ANGLgears are furnished with 2 or 3 shaft extensions. Sturdy construction permits their use either in power transmission or in manually operated assemblies, the company points out. Airborne's addition of 2:1 ratio units to its industrial line permits engineers and designers to use ANGLgears for speed reduction and to solve an even wider range of problems calling for right-angle transmission through shafting.

ANGLgears have Coniflex bevel gear

teeth, utilizing the principle of localized bearing and maintenance of broad contact. This self-adjusting feature results in smooth operation and distributes the load safely to allow greater design margins. ANGLgears are ball bearing, sealed units and are lubricated for life. Flanged end-mounting and 3-bolt side-mounting allow the units to be installed in practically any position required. ANGLgears are characterized by small, compact design. Over-all dimensions of the 3 h.p. ANGLgear, for example, are 12 by $11\frac{1}{4}$ by 4", including the 1" dia. shafts. Standard shaft length for this model is $2\frac{3}{4}$ " from housing. (Request Item No. E-2)

Aula Pad Dye Process

A new process for obtaining complete uniformity of shade when padding light to dark colors has been announced by Aula Chemicals Inc., manufacturer of water dilutable pigment colors. Aulabrite Pad Dye Process No. 18, as the new system is called, produces extremely low crock and excellent fastness to light, washing and dry cleaning. It was designed for application of Aulabrite 3,000 Series colors, for the dyeing of cotton, rayon, acetate, Orlon, nylon, Dacron and other natural and synthetic fibers.

(Request Item No. E-3)

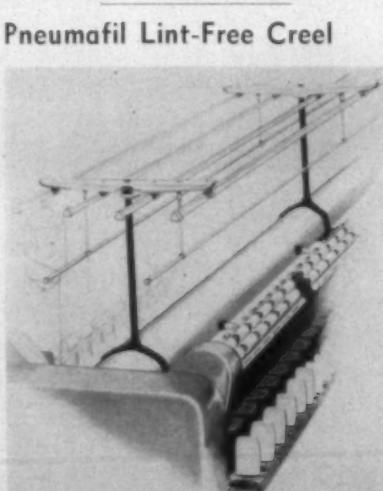
accumulation, reduces costly hand cleaning and is completely flexible in application.

Based on the findings of aeronautical engineers, the exclusive air foil principle allows air, unobstructed by any flat boards, to pass around every creel part and so clean all surfaces with the minimum of resistance. A specially designed Pneumafil header duct directs the air stream by the drafting system and through open, new-type weight wire supports. Mirror smooth parallel spans enclose the bobbin holder bolts and allow the bobbin tapers to be constantly cleaned. There is no wiping of creel or green boards to be done, no picking of bobbin tapers nor wiping of Pneumafil header ducts, the company reports.

The lint-free creel may be easily moved from a frame of one gauge to a frame of another gauge, may be easily changed from single to double roving or vice-versa, and may be easily changed from small to large packages. The equipment is available for any spinning frame need, whether single or double roving using large or small packages, Pneumafil reports. Type 'T' lint-free creel is also available for frames already equipped with Pneumafil.

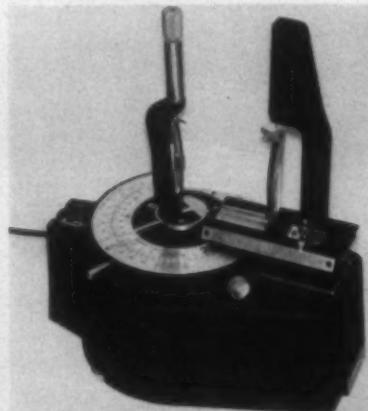
(Request Item No. E-4)

Universal Stiffness Tester



Pneumafil Type LFC with lint-free creel
(Pneumafil Corp.)

Pneumafil Type LFC featuring the all-new built-in lint-free creel is one of the latest developments of the Pneumafil Corp. This equipment, now being installed on over 900 frames in 5 Southern mills, reportedly combines the known advantages of the Pneumafil system with a revolutionary air foil designed lint-free creel. Constructed entirely of smooth-finished, aerocurved aluminum and steel, the lint-free creel eliminates slubs formerly caused by creel lint

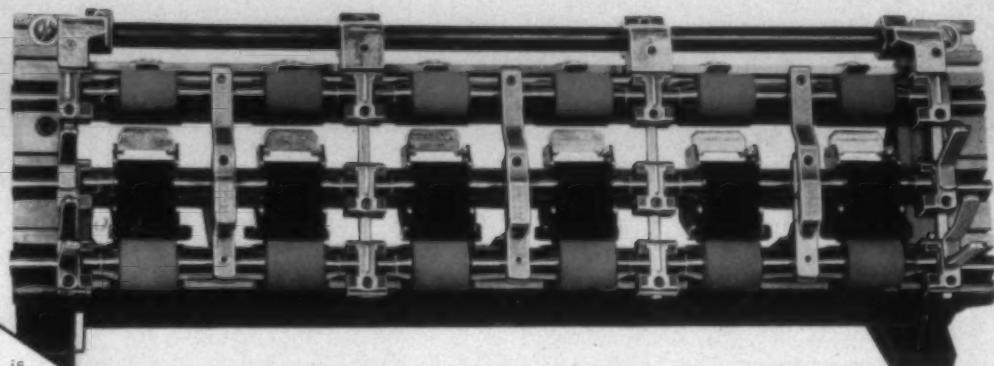


Carson-Worthington universal stiffness tester (United States Testing Co. Inc.)

A universal stiffness tester, applicable to dissimilar materials and varying thicknesses, has been developed to measure stiffness and related properties of coated fabrics and other materials. The Carson-Worthington universal stiffness tester, developed by United States Testing Co., reportedly fills the need for a generally applicable stiffness tester capable of measuring not only the stiffness of materials themselves but also the effects of coatings, treatments and dimensional differences in stiffness and related properties. The easy interchange of torsion units is said to be adjustable to different sample sizes and a wide range of stiffness

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values. Another advantage lies in its adaptability of data which are recorded in gram-centimeter rather than relative units, thus enabling comparisons between test methods or between materials. The self-checking features of this motor-driven tester, coupled with excellent reproducibility, make it useful for research as well as routine production or quality control purposes, the manufacturer reports. (Request Item No. E-5)

Static Eliminator

A new, compact Chapman static eliminator for creels and warpers has been introduced by The Portland Co. Called the Model LV-CW, this electronic static control unit consists of 1" dia. inductor bars and the Chapman LV power units. Inductor bars are placed across each stop motion eyeboard at the creel and at 4 locations on the warper. Its operation is said to be a very simple electronic principle—a high voltage induction on the inductor bars provides a constant field of ionized air from which the yarn ends may pick the required amount of either positive or negative charge to neutralize themselves. The use of the Model LV-CW prevents ballooning of ends, broken ends due to looping or sticking, and a dirty warp due to attraction of lint and dust. Designed for simple and quick attachment to the creel and warper, the Chapman static eliminator may be installed by any mechanic or electrician in a very short time, the company reports. An

additional feature of this equipment is a special hinged attachment for the 2 inductor bars over the warper, allowing these bars to be lifted out of the way for easy access to ends. (Request Item No. E-6)

Deodorizer, Germicide

The C. B. Dolge Co., manufacturer of chemicals for maintenance, has announced the development of 2 new products—Mintol, a multi-purpose germicide, and Rounds, a caketype deodorizer. Mintol, with the fragrance of meadow mint, reportedly combines pleasantness with unusual germicidal properties and refined deodorizing action. The company recommends its use wherever a true germicide is needed. Rounds, the deodorizer, is especially recommended for urinals, lavatories, storage and locker rooms, wherever odors offend. To extend the usefulness of Rounds to unlimited possibilities, an easy-to-use wire hanger is included with each package, along with clear, simple instructions and suggestions.

(Request Item No. E-7)

Du Pont Soil Retardant

A chemical which can keep rugs and carpets, fabrics, painted walls, paper and other surfaces clean and fresh-looking even when dirt is applied directly has been announced by Du Pont. Ludox colloidal silica, as the chemical is called, is described by the company as a soil retardant. Ludox works as a soil retardant by filling up the microscopically small pits and crevices, known as soil

receptor sites, that all surfaces possess in varying degree. Thus dirt can literally find no place to go and must remain on the surface where it can be removed easily. Formulations of Ludox are commercially available for treatment of rugs, carpets and upholstery materials. Development work is continuing to bring applications for other surfaces to the market.

(Request Item No. E-8)

Barrel Handling Truck



Model 600 barrel handling truck (Valley Craft Products, Inc.)

A new barrel handling truck, which is said to require no tipping or pick-up space when handling barrels touching each other, has been announced by Valley Craft Products Inc. Designated Valley barrel cart Model 600, the manufacturer says it is equipped with an automatic spring actuated bar that allows a hook to slip over the barrel edge as the truck is moved against the barrel without the operator touching either the hook or barrel. Heavy barrels stored in contact with each other can be easily loaded on the truck by a single operator without moving them apart because of this automatic clamping hook. Special design of the loading shoes provides easy tipping of the heaviest barrels. These same features make it possible to unload barrels for storage without wasted space between them by merely releasing the barrel at the desired location as it slips off the shoe when the cart is tipped forward, it is reported.

The fact that this barrel cart requires no pick-up space gives it a distinct advantage over many other barrel trucks where 2 or more operators are required for moving barrels apart before loading and pushing them together to save storage space. In addition to easily moving heavy drums of liquids, it is said that the cart is ideal for handling chip and refuse barrels as well as castings and other parts frequently stored in drums. The design of the cart includes a tubular push bar for use when tipping heavy loads and proper balance when moving small or partially filled barrels while

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bicycle-type handles are provided for easy handling of full barrels. A special kick stand is also incorporated that allows the truck to stand in a vertical position when not in use. The main frame of the cart is said to be ruggedly built from heavy 1" pipe and has a 1" dia. axle. The wheels are equipped with precision roller bearings and 10 x 3" solid rubber tires mounted on semi-steel wheels are recommended for use on smooth floors. Pneumatic tired wheels are also available for movement over rough surfaces.

(Request Item No. E-9)

Lurex-Metallized Mylar

Dobeckmun Co. has announced the addition of a new metallic yarn to its line of Lurex products. The new product, known as Lurex-Metallized Mylar, is designed for special applications where high temperatures are frequently encountered in textile dyeing operations. The development, according to Dobeckmun, represents the first major improvement in metallic yarns since the introduction of Lurex in 1946. As described by the company, the new yarn consists of the thinnest practical film of Mylar, a registered trade-mark film produced by E. I. du Pont de Nemours & Co. Inc. The film is vacuum-coated on 1 side with aluminum and laminated on 1 or both sides to prevent oxidation and give a balanced yarn. A clear, transparent adhesive is used to produce silver-colored yarn while a gold-colored adhesive results in a high luster.

non-tarnishable gold product. Lurex Metalized Mylar, Dobeckmun reports, is resistant to most dyes and will not deluster or stain even when used at 212° F. Gold and silver yarn in 150-ga., .0015" thick, and silver in 100-ga., .001" thick, both 1/64" wide is currently being produced on a limited scale.

(Request Item No. E-10)

Anti-Microbial Compounds

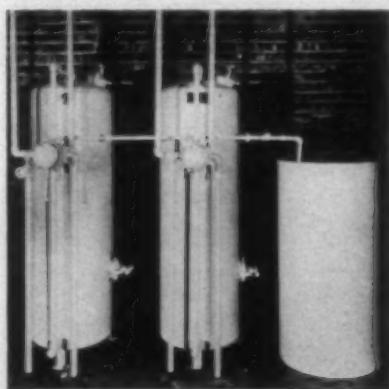
Wilcris Chemical Corp. has announced the production of a series of new anti-microbial chemical compounds for application on textiles, including fabrics for industrial, apparel and home furnishings. These products are to be marketed under the trade name Sub-Du. Laboratory tests confirm that treatment with Sub-Du renders materials actively anti-microbial without impairment of original color, texture or hand, the company reports. It was stated, according to the company, that Sub-Du functions as an efficient deodorant, preventing the formation of unpleasant odors (perspiration, urine, etc.) by striking at its source—bacterial activity. Sub-Du treated materials are immune to mildew with its resultant discoloration and loss of tensile strength. Wilcris points out that: (1) Sub-Du is a non-toxic, odorless, colorless compound, highly substantive to natural and synthetic fibers; (2) the application of Sub-Du requires no special equipment or change in normal manufacturing procedures; (3) low concentration necessary for bacteria-fungi control makes the cost of application negligible.

The company further states that where an

untreated article could be a vehicle of infection, treatment with Sub-Du prevents the spread of infectious disease. For example Sub-Du treated diapers guard against diaper rash. The treatment offers textile manufacturers a new merchandising approach, particularly in view of the consumer's awareness and desire for hygienic living. Antiseptic activity of treated fabrics, Wilcris points out, remains unimpaired for a minimum of 10 to 15 launderings. Dry cleaning results in no appreciable variation in the retention of Sub-Du. Reactivation of germicidal properties of washable fabrics can be effected by tablets, correctly dosed for use in home laundering, to be sold directly to consumer, it is said.

(Request Item No. E-11)

Small Water Softeners



Zeolite water softener operates with single multiport valve (Industrial Filter and Pump Mfg. Co.)

Industrial Filter and Pump Mfg. Co. announces several new model zeolite water softeners. They are made in 13 standard sizes with flow rates from 6.5 to 40 gallons per minute. These flow rates are designed to satisfy demands for small volumes of soft water in textile plants. The softeners are of simple design for convenient operation through a single multiport valve. They can be supplied with either automatic or semi-automatic controls. In automatic operation, the steps of backwashing, brining, rinsing and return to service are carried out automatically without an operator's attention. With the semi-automatic operation, initiation of the regeneration cycle is controlled by push button.

(Request Item No. E-12)

Warp Control Signal Light

A new 3-way signal light attached to a light channel on McBride magazine creels permits improved warping, according to the Edward J. McBride Co. The new light is out when the creel is operating normally; it goes on instantly when an end breaks to spot location for the operator; and it flashes when the locking bar is up in the drawing-in position to remind the operator to drop the bar before warping begins. Often this last step is overlooked and the stop motion remains inactive, the company points out. Signal lights are available in 4 combinations: facing back toward the creeler, facing forward toward the warper, on the outside of the light channel visible both forward

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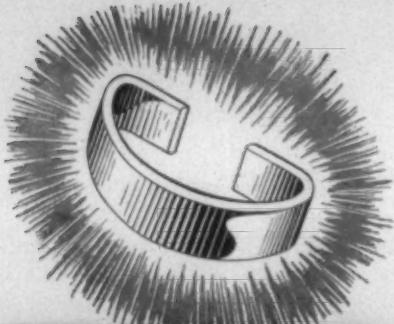
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and back, and with 2 lights, one facing forward and one facing back. This last is the most satisfactory as the lights are visible both ways, yet not vulnerable to passing traffic in the aisles. The lights are rigidly mounted in a steel channel that is hinged for ready access to the wiring.

(Request Item No. E-13)

Liquid Adhesive

A new-type adhesive, featuring a ball valve applicator on the tip of the collapsible metal tube and now being distributed nationally, is said to effectively bond paper to wood, glass, metal, acetates, plastics, tile, leather and other articles. The new product is called Glutak. Primarily for use with paper, it is an instant-drying, pressure-sensitive, rubber-base, liquid adhesive. It is non-flammable, and non-toxic and, while it grips firmly, it can be peeled apart. Excess adhesive can be rubbed off with the fingers. Uses for the new adhesive in the textile industry are varied. In addition to general office and paperwork use, it may be employed for attaching size markings and tags to merchandise, sales slips to orders, patterns to materials, and shipping labels to cartons and boxes. The adhesive comes in 1 and 3-ounce tubes.

(Request Item No. E-14)

Explosion-Proof Motors

Motor stocking has been greatly simplified with the new Louis Allis line of electric explosion-proof motors, according to a recent announcement by the Louis Allis Co. Underwriters' approval has been received for these units for use in all Class I, Group D, and Class II, Groups E, F and G hazardous locations. Every new L. A. line explosion-proof motor carries a label indicating approval for use in all 4 of these hazardous locations. Louis Allis claims that this new Underwriters' label is of great advantage to manufacturers who sell to industries requiring explosion-proof protection. Stocking problems are greatly reduced because a single motor can be used for most hazardous locations. These explosion-proof motors are available in ratings of 1 to 25 h.p., 3-phase, and 1 to 3 h.p., single-phase. Modifications of the 3-phase motors are also available with Underwriters' approval for use in Class I, Group C, hazardous locations.

(Request Item No. E-15)

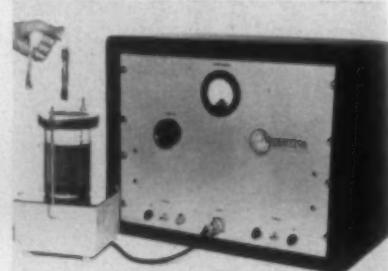
Combination Yarn

An interesting new yarn has been developed by the Metlon Corp. in conjunction with American Bemberg. The combination is made with a nubby yarn in Bemberg's nubbi, cupione or flake qualities and Metlon's 1/64" or 1/80" metallic filament. It is available in sizes from 40-denier cupione to the 5,000-denier Dream Slub. Depending on the yarn size, it can be used for all types of wearing apparel in the finer twists and in upholstery and drapery fabrics in the heavier twists. The yarn may be used on either knitting or weaving equipment and produces an unusual textured appearance.

In addition, it combines the softness, pliability and wearing qualities of Bemberg with the luxurious look of glitter to create effects that have not been possible before it is said.

(Request Item No. E-16)

Ultrasonic Vibrator



Model DR-400 ultrasonic vibrator for wet processing investigations (Acoustica Associates Inc.).

By utilizing highly-efficient low-frequency ultrasonic vibrations, the new Model DR-400 ultrasonic generating equipment announced by Acoustica Associates Inc., is said to be ideally suited for ultrasonic dyeing and wet finishing investigation of chemicals or fibers. Recent work in cellulose, rayon and other synthetic fibers has indicated far better dyeing results, particularly with such difficult-to-dye materials as Orlon, the company reports. The time required to achieve level and complete dye penetration and dyebath exhaustion at less than boil temperature was reduced in some cases to 1/6th that of high-temperature dyeing. The new ultrasonic device might point the way to savings in capital equipment, labor, steam and chemicals while raising production levels.

In operation, swatches or skeins are lowered into a dye-filled jar of the DR-400. The jar is secured to a magnetostriction-type transducer developing intense vibrations at a frequency just beyond hearing range. These vibrations create copious cavitation in the liquid. Millions of vapor bubbles are created and collapsed continuously. The terrific pressures released by the collapse of the cavitation bubbles, which are equal to thousands of Gs, break up agglomerates in liquid vehicles and produce very fine, uniform dispersions. Dye is shot into the fabrics with tremendous force without any mechanical effect on the fiber, yarn or cloth construction. Groups of these transducers can be placed in existing dye jigs for production use and can be energized from motor-generator sets. Applications in the textile field include rinsing, scouring, bleaching, sulfuric acid carbonizing, fulling, resin impregnation and other wet-finishing operations. The DR-400 is also suited for degreasing applications and the cleaning of precision metal, glass, fabric and plaster pieces.

The DR-400 consists of a transducer assembly, with Pyrex-brand cleaning jar up to 6" o.d. x 7" tall, an electronic generator and interconnecting and power cables. The transducer assembly measures 7" wide x 7" deep x 7" high and weighs 13 lbs. The electronic generator measures 21" wide x 15" deep x 15" high and weighs 107 lbs. Power input is 115 v., 50/60 cyc., 10 amps.

The transducer assembly can be moved away from the electronic generator by 10° or more as desired. At the low frequency of operation used in DR-400, vibrations are uniform throughout the solution jar. If desired, the transducer can be removed from its base and may be placed in special cleaning troughs or tanks, the company reports. Higher power ultrasonic equipment for large scale production applications to meet particular requirements are also available. (Request Item No. E-17)

Non-Ionic Softener

Melltone RH is a non-ionic softener representing a new concept in the field of textile chemical specialties developed by the research laboratories of Crown Chemical Corp. Melltone RH is a fluid readily dispersible in water at 80-90° F., it is stated. The product is being used in thermo-setting resin baths as a softener and lubricant. Melltone RH is completely compatible with those products normally encountered in dyeing and finishing operations. Being non-ionic, it has no deleterious effect on light fastness, and can be applied on high-speed equipment and closed pressure machines where the absence of foam is in marked contrast to conventional type softeners. Crown points out that Melltone RH is outstanding as a straight finish since there is no problem of color reversion or odor development due to ageing. Resultant finishes are said to have excellent anti-static properties. The softener also has remarkably high resistance to scorching. It promotes maximum fiber lubrication thus facilitating high-speed sewing and minimizing fusing of fabrics during high-speed cutting operations, Crown states.

(Request Item No. E-18)

Water-Soluble Whitener

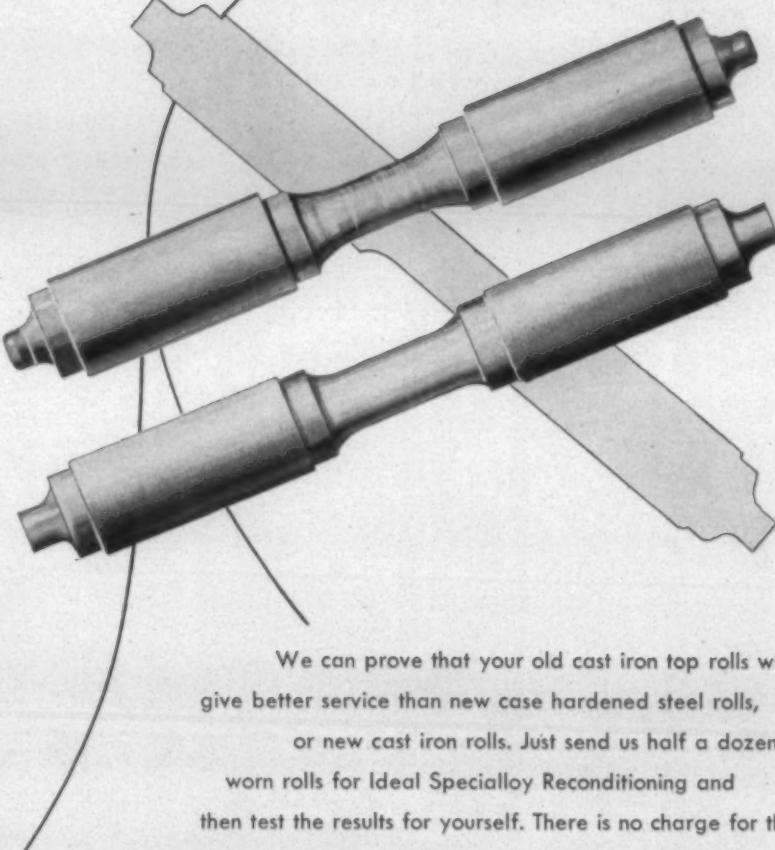
A new water-soluble whitener, Calcofluor White RWS, similar in shade and brightness to Calcofluor White RW, has been added to Cyanamid's line of brighteners, according to the dyestuffs department of American Cyanamid Co. Calcofluor White RWS has been developed especially to facilitate application procedures of brighteners to wool, nylon, acetate, pure silk and Orlon textiles, according to the company.

The water-soluble whitener may be applied by the usual dyeing or padding methods. This is done as a separate treatment during wet processing or in combination treatment during chemical washing, rinsing and bleaching; discharge printing, pastel dyeing; and application of finishing agents. (Request Item No. E-19)

Stop-Motion Attachment

Instant cast-out of individual ends is made possible with a new attachment to the McBride stop-motion, Instant-Stop. Individual switches control each drop wire permitting the individual cast-out of ends that are to be inactive. A master switch on each bank of stop motions allows the cast-out of the entire bank. Conventional cast-out of ends has been accomplished either by clumsy manipulation of the drop-wire that

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results in snarling or breaking of the yarn or else complete removal of the yarn from the drop-wire that results in knots and a time-consuming drawing-in operation, the company points out. The dilemma is resolved by the new switching attachment. The device is available from the Edward J. McBride Co., manufacturer of SRM magazine creels and a complete line of creel attachments. (Request Item No. E-20)

Wetting & Re-Wetting Agents

A series of 3 high-speed wetting and re-wetting agents, including 1 with non-foaming characteristics, have been announced by Dexter Chemical Corp. Composed of solutions of sodium diethyl sulfosuccinate, Dexolene G, B and MTV (non-foaming), according to the company, are especially effective as a wetting out assistant and dye leveller in package and skein dyeing of cottons, rayons and synthetics; assistant in finishing baths to promote thorough penetration of finish; penetrant and dispersing agent for vat dyes in pigment padding; re-wetting agent for goods which are to be pre-shrunk or which are to be padded after drying. In exceptionally high-speed processing, Dexolene MTV, it is claimed, prevents the build-up of foam and is therefore recommended in place of Dexolene G and B for this type of work. An interesting factor about this type of wetting agent, it is

pointed out, is that only exceptionally small percentages are needed. The company recommends 0.025 to 0.1% on the weight of the goods for most operations.

(Request Item No. E-21)

Nylon Slide Hook

Emmons Loom Harness Co. has announced a new nylon hook for use with slide hook harness frames. The hook consists of a metal core entirely covered with Du Pont nylon. Unlike conventional slide hooks, there is no contact of metal with metal and, therefore, considerably less friction and wear, Emmons reports. The hook positions itself promptly and prolongs the life of slide and heddle rods. It is interchangeable with most types now in use, it is said.

(Request Item No. E-22)

Vinyl Protective Coating

A new vinyl protective coating that makes possible a sharp reduction of labor costs has been developed by Amercoat Corp. The new coating, Amercoat No. 87, can be applied at a thickness of 10 mils in a single double-pass spray coat, thus providing a dense, heavy film that was previously obtainable only by multi-coat applications. According to the company, No. 87 Vinyl Mastic produces its unusual film thickness without sacrificing the chemical and moisture resistance for which vinyls are so well known. Although Amercoat No. 87 report-

edly has double the solids content of standard vinyl resin paints, the coating is easily applied with conventional industrial spray equipment, Amercoat points out. An additional feature is that the coating does not flow away from edges and sharp corners as ordinary paints, and therefore provide extra protection for such areas which are normally more vulnerable to corrosive attack. (Request Item No. E-23)

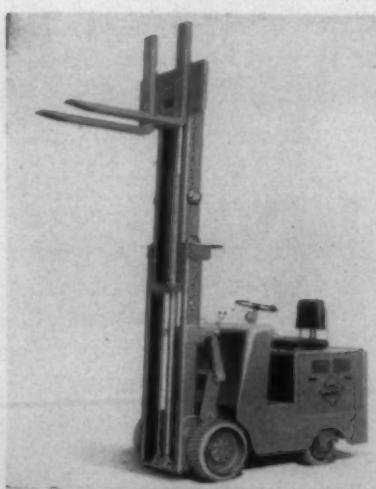
Deminerilizer

The Penfield Mfg. Co. has announced the addition to its line of industrial demineralizing equipment of a new, completely automatic Mono-Column deminerilizer designed for users of 200 g.p.h. of super high purity water. The new Penfield MA-200 deminerilizer is described as an exceptionally compact, completely packaged unit, requiring for its installation a minimum of floor space, connection of influent to a plant's water system and connection of effluent to those points where high purity water is required. Raw water enters the deminerilizing unit at the influent and after passing only once through the mono-column of mixed cation and anion resins, is received at the effluent stripped of all its impurities. A flow meter on the influent enables setting water intake at an optimum rate for the most efficient ion exchange action and a Penfield electric purity meter plus automatic controls enable automatic control of the purity of the effluent. Thus,

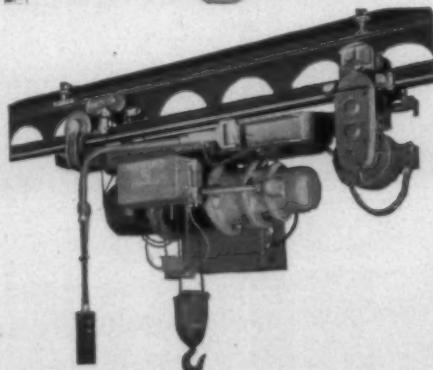


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Penfield points out, once an MA-200 de-mineralizer is installed, all operating functions, including the regeneration cycle, become completely automatic. There are no valves to operate and minimum supervision is required. Whenever the effluent's conductivity falls below standard, the treated water is automatically discharged and lights (or other warning system) signal the need for activation of a regeneration cycle. The turn of a single switch then puts the unit through its regeneration cycle automatically, including rinsing and recutting in the effluent when desired resistivity (purity) is reached. During this automatic regeneration cycle, the regeneration tanks are automatically refilled with water so that fresh acid and caustics may be added in preparation for the next regeneration cycle. Detailed catalog information on Penfield's full line of Mono-Column and Multi-Column demineralizers is available.

(Request Item No. E-24)

Executone Intercom System



Wall-type intercom station, one of several types available in the new 6000 Series (Executone Inc.)

Wall-mounted master stations and economical "single amplifier" operation are among several of the outstanding features of the new 6000 electronic intercom system, introduced by Executone Inc. Master stations in this new system are available in attractive cabinets for desk or table, and in special wall-mounted housings designed to conserve valuable desk or table space in offices, supply rooms, production and manufacturing areas, and other key locations. An economical central amplifier, drawing only as much current as a 30-w. bulb, is the only unit in the system that requires an electrical power outlet. Stations may be installed and full communication provided between as many as 6 master stations in the system, even in locations where no electrical power outlets are available. Each master station may originate calls to 5 other stations and may accept and reply to calls from any number of similar stations. Replies may be made from across the room, without leaving work or approaching station to answer. At the same time, a privacy button provided on every master station assures the user of absolute privacy, if desired.

In addition to 2-way intercom, the sys-

tem provides complete facilities for paging. To quickly locate roving personnel, a special paging button on every master permits all stations to be called at once. The master stations of the wall-mounted type are available in 2 models—flush-mount for recessing flush with the wall, where remodeling or new construction is contemplated, and surface-mount for simple installation on existing walls. Face plate of flush-mounted models is 8½" wide and 11" high; wall box is 7½" wide, 10" high and 3" deep. Surface-mount models are 8½" wide, 11" high and 3" deep. The desk or table master stations are housed in die-cast metal cabinets, finished in bronze metalastre. They measure 7¾" high, 8¾" wide and 11½"

deep. Completely enclosed in ventilated metal case, the compact central amplifier is 9¼" long, 6" wide and 6½" high. It operates on 110-120 v., 50-60 cyc. a.c. only.

(Request Item No. E-25)

Worm Gear Reducer

For long, unsupported vertical output shaft extensions, the Steeple-type worm gear reducer, produced by Philadelphia Gear Works, has been successfully used in a wide variety of applications. The Steeple feature can now be mounted on existing standard types of Philadelphia vertical worm gear units without major modifications to the basic gear unit, the company

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NON-FLUID OIL protects ball and roller bearing surfaces from friction *and* moisture by forming a perfect lubrication seal on bearing surfaces and also between rotating shafts and housing.

Year after year, more textile mills depend on dependable NON-FLUID OIL because it "stays alive" longer than ordinary greases and keeps bearings at peak performance—at lowest maintenance cost.

There is a special grade of NON-FLUID OIL for every type of ball or roller bearing. Send for Bulletin 506 and free testing sample of NON-FLUID OIL, stating size, speed, and type of bearing and machine.

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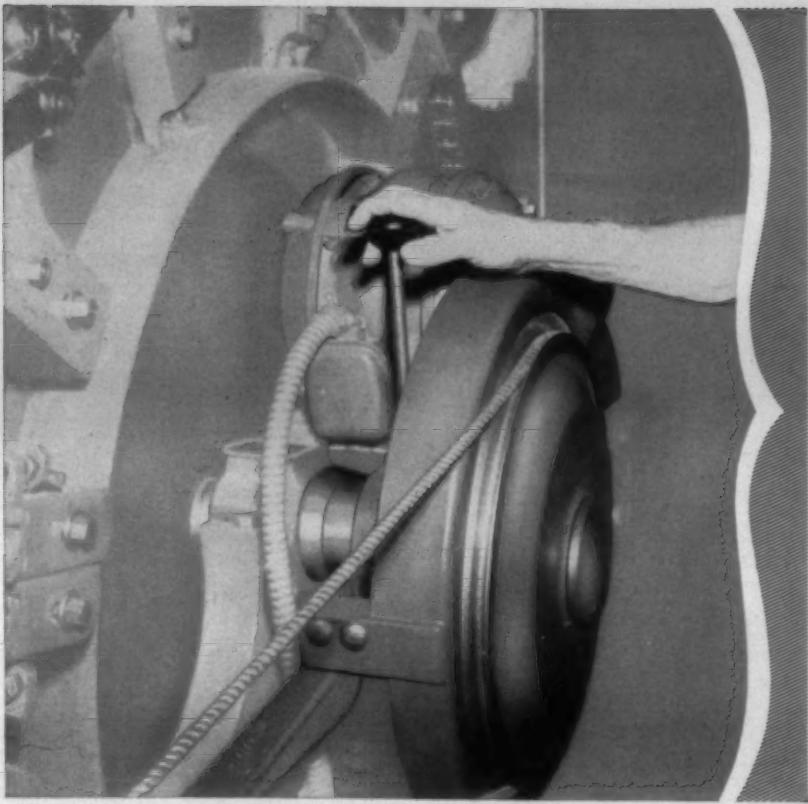
Please send me, without obligation, a free testing sample of NON-FLUID OIL.

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NO SEPARATE STRIPPING DEVICE OR CHANGES IN PROCEDURE WITH SOUTHERN STATES CARD DRIVES

There is no need to run the risk of costly accidents as a result of changes in operating methods when you install individual card drives in your mill. Southern States has eliminated that problem.

An exclusive feature—a standard-diameter, grooved pulley, built on the main drive—permits stripping in the usual manner. In every case where Southern States Individual Card Drives are used, mills report that stripping is simpler, quicker and safer.

The Southern States Card Drive is priced low enough to fully justify the elimination of old-fashioned lineshafting and belting with their well-known headaches. It is a packaged unit, quickly and easily installed. Mounts directly to card frame. No complicated reduction unit or overhung load on cylinder shaft. Occupies about the same space as a flat-belt drive. Leaves the flats clear and eliminates the danger of springing arches or damage to flats as a result of vibration.

Every month increasing numbers of Southern States Individual Card Drives are going into service. Let our representative show you how they can be made profitable for your mill.



SOUTHERN STATES
EQUIPMENT CORP.
HAMPTON, GEORGIA

FOR THE TEXTILE INDUSTRY'S USE—

reports. These drives were especially developed for agitators, mixers, circulators, pumps, washers and other vertical type drives which call for sturdy, reliable speed reductions. The wide bearing span insures extreme rigidity for the extended shaft while the "dry-well" construction eliminates the necessity of a stuffing box on the vertical shaft. To insure positive lubrication of the upper bearing on the vertical shaft, an automatic reversing oil pump, together with a filter, is embodied within the unit housing. (Request Item No. E-26)

Ident-a-Lite

Charlotte Chemical Laboratories Inc. announces the development of the Ident-a-Lite, designed to show up potential dye streaks in greige goods. The Ident-a-Lite has 3 48" ultra-violet ray lamps and a special high intensity reflector. Under its rays each of the potential dye-inhibiting types of fiber, such as immature, cat-eye or California cotton, has a characteristic reaction, the manufacturer reports. The same is true of oil spots or other contamination in greige fabric or hosiery. Thus the Ident-a-Lite eliminates potential dye streaks at their source and makes it possible to pin-point the causes of improper dye absorption.

(Request Item No. E-27)

Plastic Bag Maker



Plastic film sheeter and bag maker (LectrOmatic Devices Inc.)

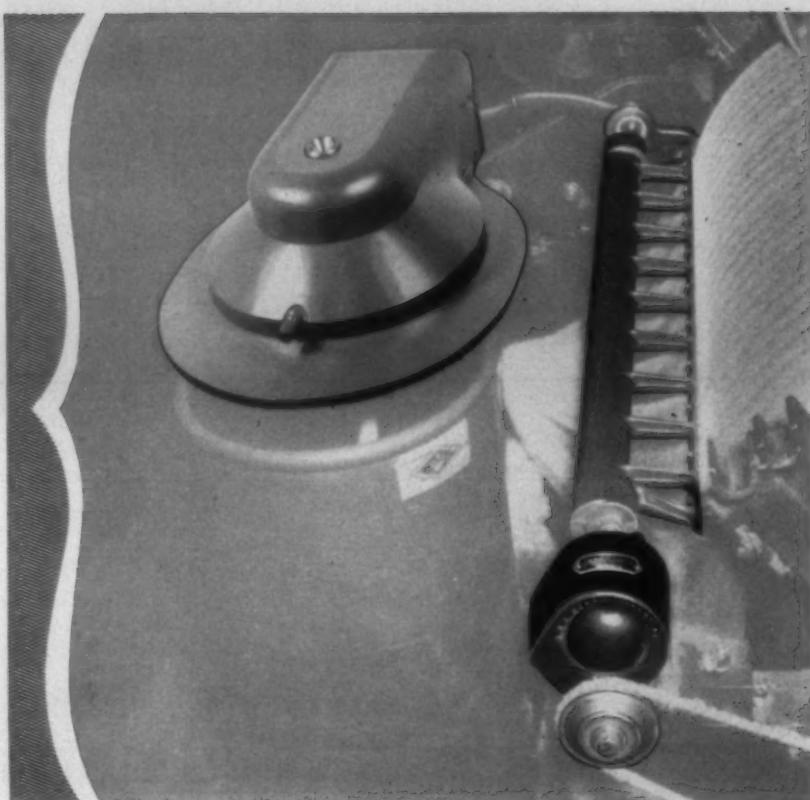
A new device known as the LectrOmatic plastic film sheeter and bag maker has recently been introduced by LectrOmatic Devices. According to the manufacturer, the new unit automatically measures, cuts and dispenses all types of plastic film, cellophane, pliofilm, polyethylene, paper and similar wrapping materials. Material is fed from roll stock which is said to be much less costly than flat sheets. The same unit vends flat sheets or will vend from tubular stock to make bags at a rate of up to 3,600 bags per hour depending on length of bag. It handles up to 22"-wide rolls and vends sheets or bags in a choice of 56 different lengths from 4" to 31½". Longer lengths may be obtained, it is said. The manufacturer stresses the simplicity of operation—

No special training is needed. Sheets or bags are measured, cut, sealed and delivered quickly. Ample work space is provided for trapping right on the table area which is 3" wide and 30" deep. A face plate-type heat sealer for manual sealing of packages can be positioned at the right end of the table, flush mounted, optional at extra cost. The unit may also be equipped with electric eye control for cutting printed stock using register marks as a guide for length dimension. This is also optional at extra cost. The unit is interchangeable for running sheets or bags without changes or adjustments. Plugs into ordinary 120 v. 60 cy. electric outlet. (Request Item No. E-28)

National Dyestuffs

National Aniline Division of Allied Chemical & Dye Corp. announces the addition of National Solantine Green BL to its line of non-dusting, fast to light direct dyes, and National Carbanthrene Black Brown VA paste to its expanding line of anthraquinone vat dyes. Solantine Green BL is said to possess excellent solubility and yields moderately bright shades of green on cotton, viscose rayon and leather. It exhibits very good fastness to light, rubbing, stoving, and dry and wet heat, dry cleaning and perspiration; and excellent fastness to water and sea water. The product is suitable for coloring cotton carpet yarns, hosiery, bathing suits, upholstery and materials to be rubberized.

The Carbanthrene Black Brown VA paste produces, on cotton and rayon, blackish brown shades of maximum fastness to light and excellent fastness to most wet processing including boiling soap and stoving. It reduces readily at 120° F. in a weakly alkaline bath to a red violet leuco and is usually



SOUTHERN STATES NOW OFFERS A FOUR-WAY COMBINATION TO BETTER CARDING OPERATIONS

No mill need put up with hot, leaky, rattling comb boxes, hard-to-align comb blades with distorted fingers, out-dated off end bearings, or antiquated coilers with small cans. Not when Southern States has a four-way answer to all of those problems and at prices every mill can afford!

One. Ball-bearing, sealed-for-life Comb Boxes that operate smoothly, quietly and never run hot.

Two. New Aluminum Comb Stock with solid blade support. Light in weight, yet more rugged than conventional steel. End journals of steel simplify balancing and assure long life. True alignment is easy. No distortion between fingers.

Three. Vibrationless Off End Stand. Pre-lubricated sealed bearing eliminates oiling. Mounts either right or left hand.

Four. Universal Coiler Head for 14- or 15-inch cans for use on any make coiler. Simplified design. Cut tooth gears and oilite bearings throughout.

These Southern States units will bring vastly improved carding operations to your mill and cut operating costs. Facts and figures, based on case histories, will prove how they pay for themselves in record-short time. Let our representative give you the details, or write us direct.



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EQUIPMENT CORP.

HAMPTON, GEORGIA

IRREGULAR PAGINATION

Type "S"
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The ROTARY UNION* is Self-Adjusting to Pressure

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Hundreds of mills have standardized on the ROTARY UNION for their slashers, dry cans, calenders, embossers, or printing machines because of ROTARY UNION service and economy. Order a set and test them for yourself, or write Dept. 5B for our catalog.



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dyed at the same temperature. The dye is said to be well suited for application in pressure dyeing equipment and may also be applied by the various pigment impregnation methods. National recommends it for coloring materials that are to be resin finished for crease resistance and for the production of materials that must possess exceptional fastness to light and commercial laundering. (Request Item No. E-29)

Acrylic Emulsions

Two new acrylic emulsions—Rhoplex X-52 and B-85—have been developed by the resinous products division of Rohm & Haas Co. Rhoplex X-52 forms films having reduced tackiness, greater hardness and improved resistance to penetration by water and organic solvents. The films are said to have the clarity, imperviousness to grease and resistance to discoloration and embrittlement typical of the acrylics. The emulsion is therefore suggested for producing clear or lightly pigmented coatings in which low water absorption, resistance to dirt collection and reduced blocking are desired. Although acrylic films are usually dissolved by aromatic solvents, the company points out, the films produced by this new emulsion are insoluble in toluene, though swelling will occur after prolonged exposure. Water absorption at 50° C., measured by weight increase at equilibrium, is low, thus providing high resistance to blushing. Best film properties are obtained by drying at 80° C. They possess extraordinary hardness, with non-ionic agents such as hydroxyethyl cellulose or methylcellulose. Although expected to be used primarily as a clear coating, it may also be formulated with clays or pigments dispersed in an 8% solution of hydroxyethyl cellulose.

Rhoplex B-85 is said to be capable of producing films that are colorless and have the clarity and aging resistance typical of the acrylics. In comparison with acrylate films, they possess extraordinary hardness, it is said. Moreover, when properly plasticized and fluxed, these films are craze-resistant, hard and brittle. Penetration by water and aliphatic solvents is very low, and resistance to dilute acids and bases is good. In unmodified form, Rhoplex B-85 is useful for imparting non-slip properties to floor finishes. Also, it can be blended with other acrylic emulsions to produce tougher clear, non-tacky films with less blocking tendencies than could heretofore be obtained with the acrylics. Unlike most other acrylic emulsions, Rhoplex B-85 does not form a continuous film when used in unmodified form. However, continuous films can be obtained readily by blending it with softer emulsions or by using plasticizing agents. The emulsion has a low viscosity and particle size is small. Mechanical and chemical stability are good, although highly acid media should be avoided. The emulsion readily withstands the stress of normal coating, brushing and spraying operations. Rhoplex B-85 is supplied in aqueous form and contains about 38% solids. It has a pH of about 10 when packed. The colloidal charge is anionic.

(Request Item No. E-30)

For the Mill Bookshelf

Glycols

A new 60-page book describing glycols has been published by Carbide and Carbon Chemicals Co., a division of Union Carbide and Carbon Corp. The 12 commercial glycols and triols sold by the company are discussed in detail. Information is included on other glycols and triols available in development quantities. The book is designed as a handy reference for chemists, engineers, purchasing agents and production and laboratory workers. It describes the uses and suggested applications for glycols. Tabular data include properties, shipping information, specifications, test methods and constant-boiling mixtures. Thirty-three easy-to-read charts contain useful physical property data. A selected list of references gives the reader sources for additional and more detailed information.

(Request Item No. E-31)

Water Treating Pumps

Milton Roy Co. announces the availability of a new 24-page bulletin, No. 953, entitled *Controlled Volume Pumps in Water Treating*. Prepared with the assistance of leading water consulting firms, this bulletin describes and illustrates how controlled volume pumps are used in typical industrial water treating systems. Typical water treating processes described include coagulation systems, lime soda softening, hot process softeners, demineralization and various types of boiler water treatment systems. Thorough analysis is given to cooling tower water treating problems as well as methods and systems for waste and sanitary water treatment.

(Request Item No. E-32)

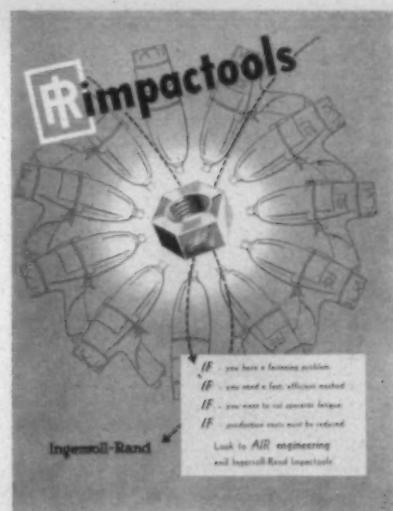
Water System Trouble Spots

The serious damage to equipment and possible injury to personnel that can result from cracking and embrittlement are discussed in a new booklet available from Hall Laboratories Inc., water engineering and treatment firm. The 6-page literature, *Cracking and Embrittlement*, outlines various water system trouble spots and factors that can produce breakage and failure in components of heaters, boilers, condensers, process equipment and interconnecting piping. Caustic and hydrogen embrittlement are discussed. It is important, notes the literature, to have an expert determine the cause of failure because on that knowledge depends the type of treatment to effect the cure. Photomicrographs in the booklet illustrate the fact that a metallographic microscope, and not the naked eye, is needed to determine the form of cracking in metals. Before the damage occurs, practical steps can be taken to control cracking and other damage to water systems, says the booklet. It advises the hiring of an experienced water engineer, whose working-level understanding of the mechanics of plant systems

is backed up by such modern examining methods as spectrography, X-ray diffraction, microscopy and chemical analysis.

(Request Item No. E-33)

Air Impactool Catalog



Ingersoll-Rand Co. announces the release of a new 52-page catalog, Form 5,200-A, devoted entirely to the problem of running nuts, bolts, cap screws and other type fasteners. The catalog contains the complete line of Air Impactools manufactured by the company. A 2-page spread is devoted to each size. It contains illustrations, specifications and the equipment furnished with each tool. On-the-job application pictures and case history studies are also included. Seventeen pages cover accessories and sockets used with the Impactools. The complete line of Ingersoll-Rand Air Tools, Universal Electric Impactools, multi-cycle electric tools and other I-R products are illustrated and described.

(Request Item No. E-34)

Temperature Control Systems

A new bulletin, F 6149-2, *Temperature Control Systems*, is now available to individuals interested in the application of automatic control to industrial process applications. Published by the Wheelco Instruments Division of Barber-Colman Co., the informative booklet is designed to help in the selection of sensing elements and their correct use for the most satisfactory results. Control terminology, as well as rules to use as a guide for the selection of a proper method of control for process characteristics, are included. Also contained in the bulletin is a complete explanation of the various types of control systems, ranging from 2-position "on-off" to proportional position with automatic reset. The question of where to use each for best control results is clearly answered.

(Request Item No. E-35)

Vulcanized Fibre

Vulcanized Fibre: New Look At An Old Plastic is the title of a 6-page reprint currently being offered by National Vulcanized Fibre Co. This reprint, from the editorial pages of *Materials & Methods*, is a refresher course for designers and engineers on the properties and diversified applications of vulcanized fibre and engineering material. The article presents detailed specifications covering the physical and chemical properties of the many grades of this material (including commercial fibre, bone fibre, Peerless electrical insulation and trunk fibre) and covers fabrication methods such as drilling, blanking, forming, piercing and lathe turning. Also contained in the reprint are several illustrated case history applications showing how vulcanized fibre solved design and manufacturing problems for companies in various industries.

(Request Item No. E-36)

Estimating Grout Requirements

A handy pocket-size card for estimating grout requirements of machinery has been released by The Master Builders Co. The card is designed for use by engineers and plant maintenance personnel as a convenient reference. Data is based on Embeco Pre-Mixed Grout, a ready-to-use, non-shrink grouting material that requires only mixing with water at the job site. The front side of the card lists Embeco Pre-Mixed Grout yield and estimating figures for one 100-lb. bag or pail, a cubic yard of flowable grout, and 100 sq. ft. of flowable grout 1" thick. The use of pea gravel in the grouting mix is discussed. On the reverse side, an easy 4 point estimating procedure is given. Packaging and storage information is also presented.

(Request Item No. E-37)

Heat-Sealing Tapes

A 4-page, 3-color brochure, highlighting applications for heat-sealing tapes, is now available from the Permacel Tape Corp. The brochure lists and illustrates many of the end-uses for Permacel's heat-sealing tapes—Permacel 500 cotton cloth and Permacel 501 non-tacky cotton cloth heat-sealing tape. An easy-to-read technical data chart outlines the properties of the tapes under various laundering and dry cleaning conditions.

(Request Item No. E-38)

Chloromethanes

Data on the diverse uses and the physical and chemical properties of the chloromethanes—methylene chloride, methyl chloride, chloroform and carbon tetrachloride—are contained in a new, comprehensive 28-page booklet offered by the Solvay Process Division of Allied Chemical and Dye Corp. In addition to data applying generally to

FOR THE MILL BOOKSHELF

the chloromethanes, the book contains individual sections that supply specific figures and information on each of the products. Included are such items as toxicity, azeotropic data, flammability, solubility, shipping, handling and storage. The section on methylene chloride contains detailed information on its use in low-pressure aerosol propellant systems and as a solvent.

(Request Item No. E-39)

Factoring Program

A booklet called *The Protected Profit Program*, which describes a profit-building plan to help manufacturers expand their business without increasing their investment or risk, has been issued by Commercial Factors Corp. The program, according to this old-line factoring firm, is based on the premise that there are 3 logical ways to build a profit: (1) by increasing volume; (2) by eliminating unnecessary costs and overhead; and (3) by spending all your time on profit-making activities. Through factoring, it is pointed out, you get cash for your goods on the day they are shipped, regardless of your selling terms. Thus a company's working capital is in a state of constant turnover, enabling it to produce more goods, to handle more sales and to accept larger orders, while earning substantial cash discounts from its own suppliers. Also

stressed is how the factoring procedure enables you to build sales by extending longer terms.

(Request Item No. E-40)

Vulcanized Fibre And Laminated Plastic

Engineering Materials For Modern Industry is the title of a new 16-page, 2-color bulletin published by National Vulcanized Fibre Co. covering the properties, grades and uses of National vulcanized fibre and phenolite laminated plastic. Case studies illustrated by more than 45 photographs match physical properties (impact resistance, dielectric strength, arc resistance, durability, light weight, flexibility, temperature and corrosion resistance, compressive and tensile strength) to typical uses for both of these materials. Tables list the general properties of the several grades of National vulcanized fibre and the 40 grades of phenolite laminated plastic.

(Request Item No. E-41)

Materials Handling Equipment

A new, complete list of products of the materials handling division of Market Forge Co. is now available. For ease of reference, Market Forge's products index has been printed as a letter-size file folder which can be used, in addition to a ready reference for information about products, as an efficient means of filing catalog information for ma-

terials handling equipment. The index may also be used as a check chart against inventory for materials handling equipment and parts, and as a guide for the selection of new or additional equipment for greater efficiency in the handling of materials.

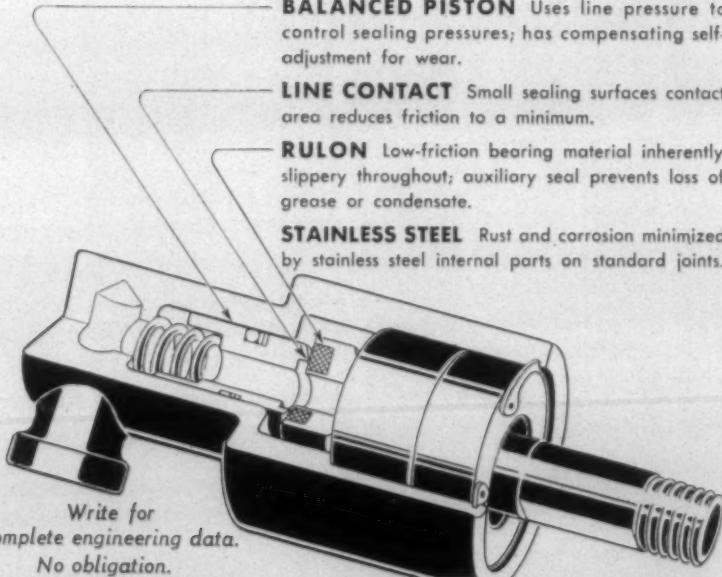
(Request Item No. E-42)

Rubber Rolls

Rubber Rolls, the first industrial handbook devoted exclusively to the subject, has just been published by Rodney Hunt Machine Co. It is a 60-page handbook, 8 x 10½", illustrated with 34 photographs, drawings and graphs, plus 4 tables of data. It contains complete, up-to-date information concerning every phase of roll manufacture, characteristic, application, operation and maintenance. Some of the illustrations show roll manufacturing and test equipment, how rolls are built up with calendered rubber sheets, bound with nylon tape, vulcanized, then ground to finished shape and size. Other photos show rubber rolls in use in textile and other plants. Line drawings and graphs illustrate many of the technical aspects of rubber rolls including: effect of rubber thickness on nip width and distribution of pressure; effect of linear pressure on width of nip, and pressure per square inch at different points through the nip; effect of concentration of load; effect of rubber density on pressure; effect of diameter on width of nip and distribution of pressure; and effect of deflection.

(Request Item No. E-43)

Here's why ANCO Rotary Joints Deliver Top Performance



Write for
complete engineering data.

No obligation.

Genuinely leakproof, hot or cold, the Anco rotary joint gives long trouble-free service under pressures up to 350 psi; speeds up to 1750 rpm; vacuum of 26"; temperatures up to 450°F; higher temperatures made to specifications.

ANCO DIVISION AMERICAN ASSOCIATES, INC.

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Conveyor Catalog

A new 16-page catalog showing the entire line of Rapistan conveying equipment has been issued by The Rapids-Standard Co. Inc. The catalog shows Rapistan gravity wheel and roller conveyors and related accessories such as spur curves, hinged sections, diverters and aluminum sections. Also included are Rapistan power belt conveyors from lightweight aluminum models to heavy-duty interfloor and horizontal steel models. For the first time, this Rapistan general catalog includes Flow Rack, a conveyorized storage rack introduced late in 1954. In addition, Rapistan guided pallet conveyor, a new turntable, case counter and the Press-Veyor series of cleated production belt conveyors are shown. The catalog includes specifications and general data on each conveyor and shows actual applications of each unit.

(Request Item No. E-44)

Strainers

S. P. Kinney Engineers Inc. announces the availability of a new 13-page strainer brochure. The collection contains photos, descriptions, dimensions, capacities, installation data and pertinent engineering information on Kinney's automatic, manual and twin basket strainers listed as follows: (1) Model A automatic self-cleaning strainer; (2) Model K automatic self-cleaning strainer; (3) Model M manually-operated self-cleaning strainer; (4) Model B twin basket strainer; and (5) Model BS twin basket self-cleaning strainer. According to Kinney, these strainers will remove fine suspended

particles from all kinds of liquids. Pipeline sizes range from 2 to 48".

(Request Item No. E-45)

Tramp Metal Detector

The Radio Corp. of America has announced the release of a new descriptive sheet, *Prevent Tramp Metal Damage* (3R2602), which describes the company's recently-developed metal detector. The unit is described and its specifications are given in the folder. According to the company, it automatically spots metal particles of all types, both magnetic and non-magnetic, regardless of how deeply embedded in the product they might be.

(Request Item No. E-46)

Chemical Catalog

Antara Chemicals, a sales division of General Aniline & Film Corp., has published a second edition of its catalog of products. In addition to established items, it describes the many new chemicals that have been developed by Antara since the first catalog was published. A new section has been added to the second catalog, listing the many items handled by Antara's special product sales department. They are shown under their chemical abstract as well as their common names. In this section there is also a description of the various available grades of carbonyl iron powder.

(Request Item No. E-47)

Temperature Controller

Application ideas and complete performance specifications for a new remote bulb, adjustable-temperature controller are described in literature now available from Fenwal Inc. The controller, available in 2 temperature ranges, 60 to 250° F. and 200 to 550° F., is said to be particularly suited to handling large electrical loads of up to 35 amps. at 120 v. a.c. Available bulb sizes, capillary lengths and various modifications are described.

(Request Item No. E-48)

The Uses Of Felt

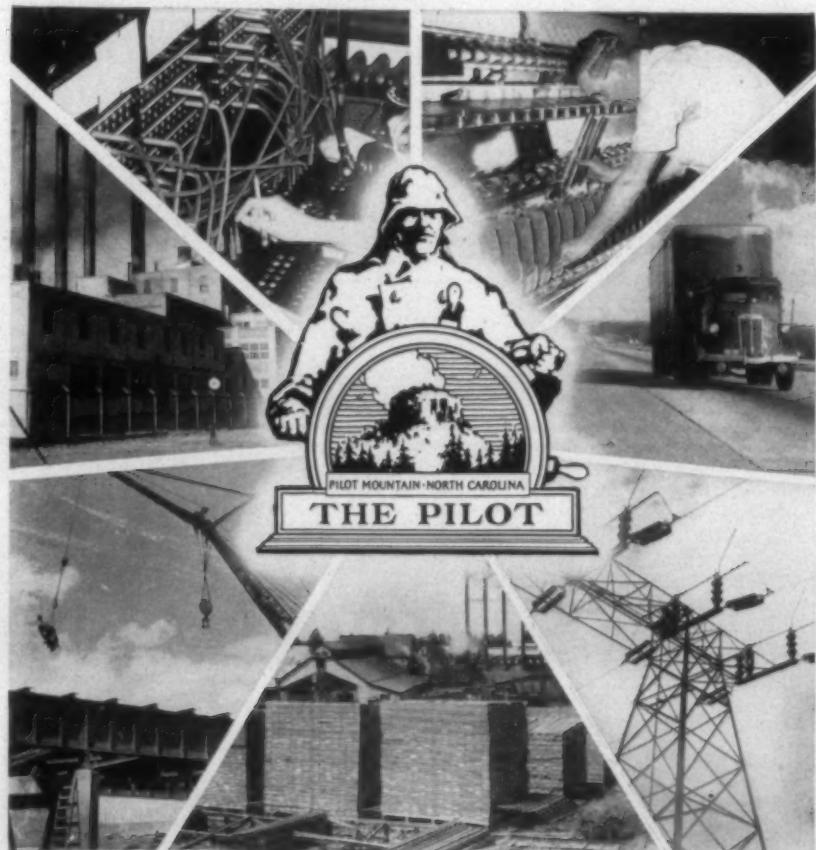
A technical brochure describing hundreds of uses of felt, with particular emphasis on mechanical applications, has been published by The Felters Co., the country's second largest manufacturer of pressed wool felts. The over-all theme of the book is that it is best to consider the part that felt plays in improving the efficiency of a given piece of equipment before it is actually manufactured or installed. Pointing up the versatility of mechanical or industrial felts and the tremendous range of available felt products, the booklet indicates that felt is impregnated with grease, wax, asphalt or rubber for special purposes; coated with many materials; comes in thicknesses from 1/32 to 3", of densities ranging from 3 to 60 ozs. per square yard; meets specifications laid down by the American Society of Testing Material, Society of Automotive Engineers, The Felt Association, the U. S. Bureau of Mines and other federal agencies. The booklet briefly describes how mechanical felts

manufactured by the company are used as follows: (1) for friction qualities: holding, dragging, rubbing, wiping and braking; (2) cushioning: backing, vibration isolation, padding and gaskets; (3) filtering air, liquids; (4) insulating material, particularly in sound absorption and air conditioning; (5) sealing: lubrication seal for bearings; sealing against air-borne dust; (6) spacing machine tools and machine products and (7) wicking, for lubrication, feeding and absorbing. The brochure also points out that, for further diversification of end-uses, felt can be punched, skived, turned, molded, combined by adhesives or stitching, bored, shaped, punched and stripped. It is likewise treated and tested for water-repellency, moth, flame, mildew, fungi-proofness or resistance.

(Request Item No. E-49)

Dyeing Of Dacron And Blends

How to avoid some of the common difficulties in dyeing Dacron and Dacron-blend fabrics is described in a technical bulletin issued by Tanatex Corp. The bulletin discusses applications of the new Tanalon dye carriers, which are said to permit even dyeing of Dacron and its blends, without spotting, staining or tarring. Tanalon carriers are now being generally released after 2 years of successful testing on more than 50 million yards of fabric. The publication explains the action of these carriers on Dacron fiber. Their controllability is claimed to make it possible to avoid spotting and tarring with greater certainty. Use of a Tanalon carrier developed especially for dyeing Dacron-wool blends without staining the



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wool, and another recommended for goods to be water-repellent finished with spray ratings over 80 are described. It is reported that all Tanalon carriers are harmless to rayon acetate, do not affect lightfastness and can be easily removed from fabrics after dyeing. (Request Item No. E-50)

Roll Surface Finishes

Finding the right roll finish for the right job is simplified for mill engineers and machine designers in the textile industry by Rodney Hunt's latest Industrial Roll Engineering Report No. 6. The report, *Roll Surface Finishes*, is one of a series published by Rodney Hunt Machine Co. intended to assist in the design and selection of rolls for specific plant applications. The illustrated report discusses the various types of precise instruments, such as profilometers and visual scales, used to measure surface roughness. It also discusses lathe finishing, deburring, polishing, grinding and ways to correct rough surface finishes on rolls used for specific purposes. A chart is included which will assist selection of proper roll surface finishes for various types of usage.

(Request Item No. E-51)

Fiber Microtome

Mico Instrument Co. has announced the release of Catalog No. 200 describing its fiber Microtome. According to the 4-page publication, the Microtome makes possible rapid preparation of very thin sections for those who study fibers, threads and yarns for laboratory and commercial analysis where speed and accuracy are of importance. Specifications and prices are listed and the instrument is illustrated. Also described in the catalog is the Mico A.A.T.C.C. Standard Rain Tester.

(Request Item No. E-52)

Caster And Wheel Catalog

A new 28-page catalog showing the complete line of Rapistan casters and wheels for light through heavy-duty use on all types of portable equipment is now available from The Rapids-Standard Co. Inc. The catalog has photos and complete specifications on all models manufactured by the company, plus a new section on special types that are available to supplement the wide range of standard units. Complete information on how to select the right equipment for specific load and floor conditions is in easy-to-use charts and tables for convenience and accuracy.

(Request Item No. E-53)

Leasing & Time Payment Plans

Towmotor Corp. announces the release of a new booklet (Lit. No. SP-19) which describes and outlines typical lease and time payment plans offered by the company on its materials handling equipment. According to the company, both plans have been well received since they were announced.

ed last year. The plans are said to be particularly attractive to small plants that otherwise might be unable to afford the allotment of capital for this purpose. The plans have also appealed to larger companies that have the money to buy, but hesitate to increase plant and capital equipment cost. The booklet describes the plans available, including monthly payments or charges, down payments on the time plan, details on insurance, maintenance, tax deductions, default, purchase provisions and other pertinent information.

(Request Item No. E-54)

Flyers And Spindles

Ideal Machine Shops Inc. has announced the release of a 14-page booklet entitled *Facts About Your Flyers & Spindles*. The booklet graphically points out how flyers and spindles should operate, compared with how they sometimes operate when misaligned, improperly balanced, etc. Ideal's process for reconditioning and rebuilding flyers and spindles is described, listing step by step corrections that must be made. Other Ideal services are also discussed, including rebuilding spinning and roving frame top rolls and metallizing for any purpose.

(Request Item No. E-55)

Saco-Lowell Repair Sales News

As a further step in its informational and promotional campaign for new and standard replacement parts which are available from its repair sales division, Saco-Lowell Shops has published the first issue of *Saco-Lowell Repair Sales News*, a tabloid size newspaper. Items of interest to supervisors of picker, card, spinning, twister and slasher rooms are included. Prepared and produced at the machinery manufacturer's Biddeford, Me., plant, the new newspaper will appear at regular intervals and will be mailed free to front-line mill men responsible for processing operations and equipment purchases. Saco-Lowell states in the new newspaper that any member of mill management desiring to keep abreast of current Saco-Lowell machinery replacement parts and assemblies that will keep his mill competitive need only send his name, mill address and mill position to be placed on the mailing list.

(Request Item No. E-56)

I.C.S. Textbooks

Four new texts have been added to the textile curriculum of the International Correspondence Schools, Scranton, Pa. Specifically prepared for home study by Dr. George E. Linton, dean of the textile department, Fashion Institute of Technology, New York City, the well-illustrated texts are: *Introduction to Textiles*, *Standard Textile Fabrics* (2 parts) and *Textiles: Care and Testing*.

Introduction to Textiles contains a brief, concise history of the industry. Attention is focused on the language of textiles, and comparisons are made among woven, knitted, braided and felt fabrics. Part of the text is devoted to descriptions of how yarns and fabrics are made. *Standard Textile Fab-*

rics, Part 1, is devoted exclusively to the industry's major fiber, cotton. Part 2 emphasizes other fabrics, especially wool, silk and synthetics. The texts are alphabetically arranged for use as handy reference books covering all fabrics from abbots cloth to zephyr gingham. *Textiles: Care and Testing* covers dry and wet cleaning, special cleaning problems, stain removal, art mending via reweaving, stotting and patching; consumer testing for wearing quality, light wash and dye fastness; effects of ironing and perspiration on cloth; and the problems of crocking and shrinkage. The new texts are available under the I.C.S. selective plan which permits employers to select only those subjects required to achieve specific training objectives for their personnel.

Opportunities In Puerto Rico

Facts for Businessmen, a 72-page brochure on industrial opportunities in Puerto Rico, has been released today by the island's Economic Development Administration. Generously illustrated with photographs, maps and charts, the booklet describes the experience of 300 mainland manufacturers who have expanded to the island since 1947; discusses such "special incentives" as freedom from federal taxation, local tax exemption, government-leased factory buildings, long-term government development bank loans as well as wage rates, public utilities, financial and transportation facilities. A 6-page supplementary section analyzes Puerto Rico's Industrial Incentives Act of 1954 which offers manufacturers 100% tax exemption for 10 years from the start of their operations. Write: "Facts," Economic Development Administration, 579 Fifth Ave., New York 17, N.Y.

What's New On The Labor-Management Front

(Published by the American Management Association, 330 W. 42nd St., New York 36; Personnel Management Series No. 161—48 pp—Price \$1.75)

This booklet reviews the latest developments in labor-management relations and sets forth the implications of these changes for all personnel executives. Specific problems and practical solutions, without neglecting long-range considerations, are discussed. Professor Carroll B. Daugherty of Northwestern University surveys "Some Labor-Management Trends and Their Implications." Changes in the labor scene (mergers of unions, the development of a new species of union leader, the growing unity of the American work force), automation, employee communications and government action, are some of the topics discussed. Raymond S. Smethurst, formerly general counsel for the N.A.M. and now specializing in the private practice of labor law, writes definitively to indicate that "Taft-Hartley is Not Static." The vice-president of General Aniline & Film Corp., Matthew M. Gouger, draws on his experience in corporate industrial relations work in many fields to write on "Negotiating a Competitive Company-Union Contract." His paper includes a discussion of the effect of changes in the economic climate on company-un-

on negotiations and sets forth principles for more efficient contract negotiations. The implications of the U.A.W. proposals on "The Pivotal Issue: The Guaranteed Annual Wage" are explored by Professor William L. Dennis of the Law School of New York University. He reviews the thinking of labor officials on this subject and presents a survey of the problems raised by the guaranteed annual wage question.

Consumer Surveys

Reports of national surveys on ownership of sheets, bedspreads and towels by subscribers of *Farm Journal* and *Town Journal* magazines have been released by the research department of Farm Journal Inc. The surveys, published separately for each magazine, cover both farm and town homes. They report number of bedrooms, number and sizes of beds, statistics on sheets by material, size, color, type, brand and price. On bedspreads, the surveys report number and size of spreads owned; whether home-made or purchased; percentage of families owning matching spreads and draperies. Statistics on towels include number of bath towels owned; design preferences; prices paid; brand preferences. Comparable information is presented for hand towels, wash-

cloths and dish towels. Copies of the reports may be obtained from the research department, Farm Journal Inc., Washington Square, Philadelphia 5, Pa.

A.S.T.M. Proceedings

(1954 edition; published by American Society for Testing Materials, 1916 Race St., Philadelphia 3, Pa.; \$12.00)

This 1,400-page volume records the technical accomplishments of the A.S.T.M. for the year 1954. It includes many technical reports and papers together with discussion which has been offered to the society during the year and accepted for publication. Leading the volume is the summary of the proceedings of the 57th annual meeting, held in June 1954, listing by title and author the program for each of 36 sessions. Reports of the technical committees, of which there are 68, and their appendices provide useful technical information as do the 37 technical papers and discussions on a wide variety of subjects pertaining to research and testing of materials. In addition to the papers and reports, there are listed in the table of contents all symposiums published separately as special technical publications and all papers published in the A.S.T.M. *Bulletin*.

In addition to reports and technical papers, many of which have been given at the society's annual meeting and some of which have been preprinted, the *Proceedings* contain much discussion that has been submitted and not previously published. Copies can be purchased from the A.S.T.M. at the above address.

A Review Of The National Cotton Council

The National Cotton Council has prepared a brief review of its "16 challenging years in the progress of cotton's industry-wide program" entitled *The Record of the National Cotton Council of America*. Prepared by Dr. M. K. Horne Jr. from information and materials developed by the 4 program directors of the council, the booklet poses the question "What has the council done?", and answers the question by citing the council's general program, its specific activities, past achievements and current outlook. A major portion of the booklet contains an appendix to the council's record, listing brief explanations of 64 specific accomplishments. Copies can be obtained from the council's Memphis, Tenn., office, P. O. Box 18.

Serving The Textile Industry

New Dyestuff Plant Opens In South Carolina

Production of fast colors is now in full swing at the Croft Works, Spartanburg, S. C., on the site purchased last August by Alliance Color & Chemical Co. and Blackman-Uhler Co., then newly-merged into The Andover Co. Naphthols are the principal output of the new plant. The Croft Works is under the direct supervision of Harold W. Coward, president of Alliance, who is in charge of manufacturing operations for all Andover divisions. Erwin Thornton, who had been in charge of the Blackman-Uhler laboratories, has been appointed superintendent. Donald Belcher, formerly Mr. Thornton's assistant, has been promoted to the position previously held by Mr. Thornton. Walter E. (Bud) Eskew, until recently a technical consultant to Blackman-Uhler, has now joined the company as technical director of the Croft Works.

According to Harold W. Rose, president of The Andover Co., the additional capacity of this plant makes the company and its divisions the largest exclusive manufacturers of fast colors in the U. S. Specifically, it was pointed out, the Croft Works, supplementing the Alliance plant at Newark, N. J., is providing (1) important additions to the line of naphthols; (2) increased over-all productive capacity; (3) same-day or overnight deliveries throughout the South; (4) more laboratory facilities to devote to cus-

tomer problems. The Newark plant continues to produce the bulk of the company's fast color salts and bases. The Croft Works, in addition to naphthols, is also producing Azogen printing colors and Buco tints, formerly manufactured by Blackman-Uhler in Spartanburg.

Griffin Size Applicators To Be Made By West Point

License to manufacture Griffin size applicators has been issued to the West Point (Ga.) Foundry and Machine Co., according to an announcement by Ira L. Griffin and Sons, Charlotte, N. C. The Griffin applicator will be made by West Point according to the Griffin plans and specifications and under Griffin patents. The Textile Shops, Spartanburg, S. C., has manufactured all previous Griffin size applicators and will continue its production of them. West Point production will be an addition to Griffin production facilities and marks an expansion in Griffin's operation.

Seydel-Woolley Expanding Facilities In Atlanta

Seydel-Woolley & Co., one of the nation's leading manufacturers of textile chemicals, is currently carrying out its sixth major expansion since returning to Atlanta,

Ga., in 1923. This firm, specializing in warp sizing and wet processing auxiliaries, had its beginning in 1904 in Atlanta as the Atlanta Compound Co., organized to service the textile trade. Founded by Paul and Herman Seydel, the Atlanta Compound Co. grew slowly for a few years, until the Seydel brothers decided they were working under a handicap by being in the South. At that time, there was a general feeling that anything made in the North was better. They, therefore, moved to Jersey City, and flourished under the name of the Seydel Chemical Co. Growth was rapid up to, and through, the first World War, with the firm branching out into several other lines of chemicals, including pharmaceuticals and intermediates. In 1923, Paul Seydel returned to Atlanta as president of the new firm of Seydel-Woolley & Co. Vasser Woolley, who had formerly been general superintendent, was made sales manager; and after the death of Mr. Seydel, became president. Paul Seydel Jr. and John Seydel, Mr. Seydel's two sons, were made vice-presidents. Specializing at first in warp sizing, the company's faith in the South as a growing influence in the industrial field was well repaid, for Seydel-Woolley & Co., before many years, became one of the nation's largest producer of warp sizing compounds.

Present expansion is in the storage and manufacturing facilities, particularly for the more recently formed finishing chemicals division, which produces the surface active

SERVING THE TEXTILE INDUSTRY—

agents, softeners and similar wet processing auxiliaries for Seyco products. Less than three years ago, it was necessary to build a separate building to house this division of the company, and the division's growth has already made the facilities inadequate. Plans are also being drawn for expansion of its laboratory facilities. The rapidly changing operations in the textile field due to new fibers and new treatments of old fibers requires an ever-expanding research program and development work, the company points out, and it intends to keep pace with these changes.

J. E. Rhoads And Son Moves Main Office To Delaware

J. E. Rhoads and Sons, manufacturer of industrial leathers, has moved its main office from 35 N. 6th St., Philadelphia, Pa., to 2100 W. 11th St., Wilmington 99, Del. A new air-conditioned office building, which is adjacent to the plant, will accommodate the sales department on the first floor, with finance and accounting on the second floor. The move is expected to result in quicker deliveries, more complete stocks from the plant, and closer co-ordination of sales, engineering, research and production.

American Thermometer Becomes American Controls

The American Thermometer Division of Robertshaw-Fulton Controls Co., producer of automatic control devices, has been redesignated the American Controls Division. The division is located in St. Louis, Mo. The name was changed to more closely identify the division with its products, the company reports.

National Aniline Opens New Research Center

National Aniline Division, Allied Chemical & Dye Corp., has announced completion of its multi-million dollar research and engineering center at the company's Buffalo, N. Y., plant. Formal opening exercises were held May 19-21 to coincide with Chemical Progress Week throughout the nation.

Johnson Motor Lines Announces Expansion

An expansion program, involving the purchase of new equipment and expansion of both terminal and maintenance facilities, providing for increased safety and motive power and improved service in its long line operation between Atlanta and Boston has been announced by Johnson Motor Lines Inc., Charlotte, N. C. In an initial step designed to replace its present long line equipment, 16 Diesel-powered International DC-405-L tractors of a new cab-over-engine design have been purchased and an 80' extension is being added to Charlotte warehouse facilities to provide for present and future needs in handling traffic in the Charlotte area. The general maintenance

facilities of the company are now being moved to 220 Dalton Ave., which has a garage building of 18,000 sq. ft. with 150,000' of yard facilities. Johnson was organized in 1946 with 41 pieces of equipment and 31 employees. It initially operated only out of terminals at Charlotte, New York and New England. The company now operates a fleet of 748 units from 19 terminals between Georgia and Massachusetts, traveling over 24 million miles annually.

American Pulley Co. Buys Lift Truck Line

The American Pulley Co. of Philadelphia, Pa., has purchased the assets of Safeway Industrial Equipment Corp., Chicago, Ill., manufacturer of a complete line of manually and electrically-operated hydraulic lift trucks. Internationally known for its line of pressed-steel 2-wheel hand trucks, barrel cradles and industrial wheels, American Pulley by this move will widen its markets to include innumerable materials handling tasks which, by their nature, require more than horizontal handling and yet cannot be done efficiently by the larger full-powered lift trucks due to their size and cost. It is planned to merchandise these lift trucks under the trade name of American Safeway and through the nation-wide American Pulley distribution network. Harry T. Carroll, former president of the Safeway, has joined American Pulley and will operate out of Chicago, where stocks will continue to be maintained. In the near future, manufacturing and engineering will be transferred to the American Pulley facilities in Philadelphia.

Plastic Mold & Engineering Transfers Sales Offices

Plastic Mold & Engineering Co., Providence, R. I., has announced that its sales office has been moved from Wellesley, Mass., to the Providence plant at 157 Clifford St. in order to more closely correlate sales efforts with increased production requirements. The company manufactures Nylaclad narrow fabric quills, Zytel nylon braider bobbins and cop holders, and Plamenco braider bobbins, cop holders and wire braider spools.

Free Check Design Service Offered

Individual creation of company bank checks has been offered as a free service to the textile industry by the Todd Co., Inc., Rochester, N. Y. Todd has established creative design departments in 30 key U. S. cities, and any firm may submit samples of its present check to Todd's creative design department in Rochester for evaluation of advertising and public relations effectiveness. Recommendations will be made from the zone offices by the firm's check design experts in the form of suggested illustrations best depicting the company. Todd points out that any firm distributing as few as 50 checks weekly reaches more people than the average weekly newspaper, while a company writing 3,000 checks every 30 days influences more than 50,000 people

monthly. Many of these people, Todd believes, are potential customers ignored by other communications media. The company bases its estimate on American Banking Association figures that show the average check passes through the hands of at least 16 people. Todd's Rochester address is P. O. Box 910.

Ashworth Bros., Franklin Get Advertising Awards

Advertising awards made recently in the 1955 Creative Awards Competition of the National Advertising Agency Network included 2 firms serving the textile industry, Ashworth Bros. Inc. and Franklin Process Co. Ashworth was presented an honorable mention award, and Franklin received certificates for merit award for product campaign in non-merchandising business publications; excellence award for national direct mail campaign; and merit award for physical appearance of space advertising. The awards were made to George T. Metcalf, president of George T. Metcalf Co., Advertising, Providence, R. I.

New Paper Tube Firm Opens At Rock Hill, S. C.

A new plant producing paper tubes for the textile industry has been organized in Rock Hill, S. C. Star Paper Tube Inc., operated by 3 brothers, Charles, Herman and Richard Roediger, has started operations in a warehouse-type building of some 9,000 sq. ft. of floor space. Charles Roediger is supervising the operation. He has been associated with the paper tube business 13 years in New England and North Carolina.

Old Dominion Box Co. Buys Paper Board Firm

Old Dominion Box Co. of Lynchburg, Va., has purchased Halltown (W. Va.) Paper Board Co., and will continue to operate it as a supplier of paper board for the 9 box plants of Old Dominion. D. H. Dillard of Old Dominion has been named chairman of the board of Halltown, which will become Valley Board Co., and his son, E. S. Dillard of Charlotte, will be its president. Philip N. Nelson, former president of Halltown, has been named vice-president of the company, and W. S. Venable will continue as secretary-treasurer.

Draper Plans Two Expansion Projects

Two new expansion projects have been announced recently by Draper Corp., Hopedale, Mass. The company will build a small plant containing some 30,000 sq. ft. at Swannanoa, N. C., for sawing, drying and storing dogwood and hickory blocks. This plant will be about twice as large as the company's present plant at Biltmore, N. C., which the new plant will replace. Draper bought the Swannanoa site in 1949. The second expansion project will add 42,000 sq. ft. to the Draper plant in East Spartanburg, S. C. This new building is being built to bring machine shop capacity in line with recently increased foundry fa-

cilities. The one-story brick and steel structure, to cost \$400,000, is designed to permit maximum use of materials handling equipment and modern machinery for the production of loom parts, changeovers and new attachments. Less than 2 years ago Draper completely modernized and enlarged the foundry and core room facilities at East Spartanburg. This, with the new building, will represent a figure well in excess of 3 million dollars spent on modernization in the East Spartanburg plant. Earlier this year, Draper built a new warehouse in Atlanta, Ga.

Roberts & Co. To Build New Spinning Frames

Roberts & Co., Sanford, N. C., expects to be in full operation building new and complete spinning frames by the end of this year, according to R. E. Pomeranz, president of the company. The firm has purchased a plant with 60,000 sq. ft. of floor space to accommodate the new operation. Some 30 additional employees will be required under the expansion.

Belding Corticelli Licensed To Produce Du Pont's Nylon 8

The first license to produce and market commercially Nylon 8, a new plastic for industrial and consumer products, has been granted by E. I. du Pont de Nemours & Co. to Belding Corticelli Industries Inc., newly-established subsidiary of Belding Heminway Co., Inc., New York. The new "tempered" nylon plastic, designated as Nylon 8 by Du Pont, is to be known as BCI Nylon as produced in commercial volume for the first time by Belding Corticelli Industries for diversified uses in the textile and other industries. Unlike original nylon, BCI Nylon

can be processed in liquid form, as well as by the standard methods used for all plastics. Nylon 8, produced at the newly-equipped Putnam, Conn., plant of Belding Corticelli in granular, pellet and liquid form, will reportedly give added durability and satisfaction to a wide range of products.

Ceramic Fiber Project Established In New York

Ceramic Fiber Project has been established as a new operating unit of the Carborundum Co., Niagara Falls, N. Y. The new unit will reportedly manufacture high-temperature fibers finer than human hair by developing production techniques and applications of ceramic fibers, known as Fiberfrax. Since its introduction in 1952, the product has been in pilot plant manufacture. As blown from molten aluminum oxide and silica, Fiberfrax fiber is a cotton-like mass of extremely fine fibers arranged in random fashion. It is said to remain stable at temperatures as high as 2,300° F. Fiberfrax fiber is expected to be commercially available in textile forms this year.

New England Firm Plans Use Of Electronics

A new firm has been organized in Warwick, R. I., for the primary purpose of offering engineering service, but also to develop, build and install preparatory machinery, some based on electronic principles. The new firm, Textile Engineers Inc., is headed by Robert Leslie Sr., president, Robert Leslie Jr., vice-president, and John F. Damon, treasurer. The firm is said to hold 18 pending patents on new machines and processes, including a tow-to-top machine that takes synthetic waste, drawn or undrawn, for conversion into sliver without

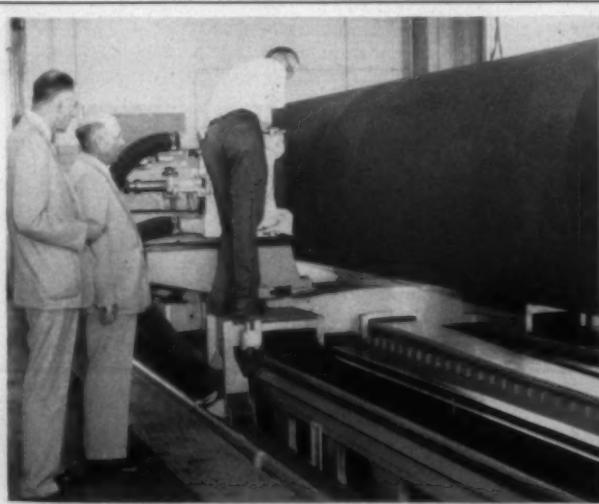
carding through utilization of electronics; an electronic carbonizer that carbonizes impurities from wool without acids; electronic pre-shrinking of woolens without acids; a group of 3 machines to de-hair cashmere without carding; a high-draft system for woolens, worsteds, synthetics and cottons; a fallerless gill box that gives fiber parallelization without combing; and electronics setting of Vigoreux printing for a continuous set. The firm operates a machine shop at 3070 Post Rd., Apponaug, R. I.

American Moistening Plans New North Carolina Plant

American Moistening Co., a subsidiary of Grinnell Co. Inc., has purchased a 100-acre site near Cleveland, N. C., for the construction of a small manufacturing plant. The plant, situated about 10 miles from Salisbury, N. C., will manufacture humidification and air conditioning equipment for the textile industry. Construction is expected to start soon.

Daniel And Sirrine Firms Given Special Recognition

Daniel Construction Co., general contractors, and J. E. Sirrine Co., engineers, both of Greenville, S. C., were awarded special citations May 2 in recognition of their achievements as contractor and designing engineer for the new \$5.5 million plant for Coats and Clark Inc. at Toccoa, Ga. The plant was selected by *Factory* magazine as one of ten on which awards were made in the 21st annual competition for "Significant Plants of the Year" award. In making the award, attention was called to the efficient use of all available floor space in the plant. The plant contains some 364,000 square feet of floor area.

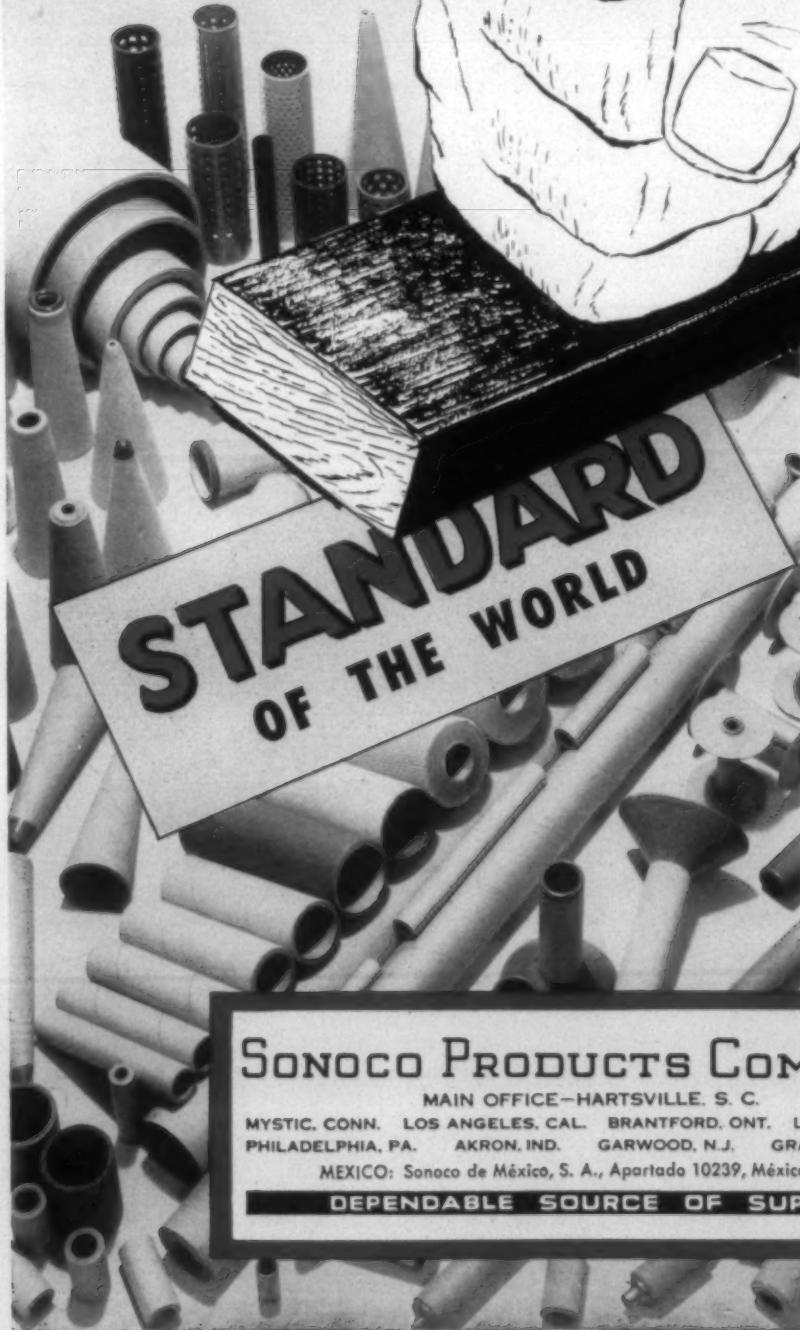


Hensley, Lyman, Pritchett—Vaughan, Bailey, J. M. Cheatham, J. H. Cheatham, Parker, Morganstern

FORMAL OPENING AND DEDICATION—The latest techniques in the art of rubber roll compounding and covering were on display May 4 at the formal opening and dedication of the newest rubber roll plant of Stowe-Woodward Inc. at Griffin, Ga. Put into production early this year and now in full-scale operation, the new plant is fully equipped for the covering and finishing of all types of textile rolls, from the smallest to the largest. Some 500 guests toured the plant during the celebration, followed by a barbecue on the plant grounds. Shown watching the plant's grinder man, Lawrence Pritchett, are E. S. Hensley and S. D. Lyman of Pacific Mills, Lyman, S. C. Watching James A. Vaughn make a rubber-covered roll are Seaton Bailey; J. M. Cheatham, president, and J. H. Cheatham, vice-president, of Dundee Mills Inc., Griffin, Ga.; C. T. Parker; and Clarence Morganstern, Stowe-Woodward sales engineer. The new plant, located on a 25-acre plot just outside Griffin, contains some 28,000 square feet of floor area.

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textile bulletin

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TEXTILE BULLETIN is devoted to the dissemination of information and the exchange of opinion relative to the spinning and weaving phases of the textile industry, as well as the dyeing and finishing of yarns and woven fabrics. Appropriate material, technical and otherwise, is solicited and paid for at regular rates. Opinions expressed by contributors are theirs and not necessarily those of the editors and publishers. Circulation rates are: one year payable in advance, \$1.50; three years payable in advance, \$3.00;

Raw Cotton, And Some Fact-Facing

The Cotton Belt is beginning to cast a reappraising eye on the Federal Government's post-depression price support program. It is tooled up for a 25-million-acre production and for two years now it has had to cut back to about 18 million. And, ironically enough, this comes at a time when the cotton producer stands on the threshold of an entirely new era of production efficiency that has been brought about by the use of machinery, chemicals and improved varieties.

Obviously, these methods require vastly increased capital investment and big additions to fixed costs. Such increases in cost can be justified, according to many producers' views, only if volume is adequate and sufficiently stable to lower unit costs, since earnings or profits, after all, are dependent on unit costs. And they say if this tremendous increase in expenses is not to bankrupt many of them, they must have stability of production at a level high enough to be able to make optimum use of the machinery.

Meanwhile they continue to struggle against drastic acreage cutbacks, enormously expanded foreign production, dwindling of a one-time export market of six million bales, and inroads by synthetics and other products. And under rigid price supports, they see no end to the dismal picture.

In fact, the raw cotton industry seems to be moving inexorably toward a decision—and possibly sooner than anyone ever expected—as to whether it should go along with present high price supports and drastically restricted acreages, or sanction a change in government policy to bring competitive prices, greater acreages and larger sales volume.

Not since the government began its cotton price support and production control program in the wake of the depression of the early 1930s has the issue moved so sharply into the forefront as it has in recent months.

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one year, Canada, \$3.00; one year, other countries in Postal Union, \$5.00; single copies, 25 cents. A companion monthly journal, THE KNITTER, is published by Clark Publishing Co. and devoted to the interests of the knitgoods manufacturing industry.

Significant is the shift in some Cotton Belt thinking. King pin of the so-called "cotton bloc" in Congress is Senator James O. Eastland of Mississippi, himself a large-scale cotton farmer. And he has come out flatly and said in unmistakable words: "It is my opinion that the farmer must compete in price with synthetic fibers and foreign production of cotton. The 90 per cent price support program is slowly destroying the American cotton industry."

The present plight of the cotton farmer, he says, proves the "absurdity" of trying to keep world cotton supplies in balance through production controls in this country. At the same time the Mississippian offers a "blueprint" for the short-term and long-range solution of the U. S. cotton problem that has stirred discussion in the Cotton Belt probably more than anything else in a long time.

Senator Eastland feels that the cotton farmer himself, by his own vote, should make the choice between sharp acreage curtailment and high price support as against expanded production, competitive price and a larger market.

The cotton farmers haven't had the opportunity in the past to make such a clear-cut choice, though for many years they have gone along with the government and its ideas on production and control, being well aware of the consequences if they voted against acreage controls.

The Department of Agriculture has been studying the Eastland long-range plan, and Secretary Benson has commented that he likes the idea of offering cotton farmers somewhat lower price supports and larger planting allotments.

As a short-range policy, Senator Eastland, who is chairman of the Senate subcommittee that has been investigating disposal of agricultural surpluses, feels that the big cotton surplus should be liquidated by a special export program for six million bales.

This "blueprint" projected by Senator Eastland calls for

EDITORIAL

protection of the U. S. mill industry through "a practical off-set arrangement to insure that the cotton cost involved in the goods exported is equalized." It also proposes some device such as import quotas to keep the U. S. manufacturing industry from being placed at a further disadvantage at home with respect to competition from overseas.

Past policy, Senator Eastland says, has simply greatly encouraged foreign producers to expand cotton production, since they can enjoy the benefits of a world price, supported by the U. S. price, yet have to bear none of the burden that goes with production curtailment. Some of the countries that were almost insignificant in terms of cotton production now grow substantial quantities of cotton, having boosted their acreage six to thirteen times that grown at the end of World War II.

"If we include Communist areas, we find that the increase

—note this, just the increase—in foreign acreage in 1954 over the average five years just after World War II is larger than the total acreage planted in the United States in 1943," Senator Eastland remarks.

Back before World War II the United States was accustomed to exporting five to six million bales of cotton annually. In the four years preceding the 1952-53 season, raw cotton exports averaged about five million bales a year.

During that same time, textile exports were at a rate of about a million bales on a raw cotton basis. Then came the export slump in both cotton and textiles—cotton down to 3½ million bales and mill products down to three-fourths of a million bales in cotton equivalent.

Another reason for the U. S. cotton farmer's exasperation, Senator Eastland observes, is the greatly increased synthetic fiber production outside the United States which in the last five years has doubled, reaching an equivalent of eight million bales of cotton.

TEXTILE INDUSTRY SCHEDULE

—1955—

- June 2-4 (Th-Sa)—AMERICAN COTTON CONGRESS, Harlingen, Tex.
June 3-4 (F-Sa)—Annual outing, SOUTHEASTERN SEC., A.A.T.C.C., Radium Springs, Albany, Ga.
June 9-10 (Th-F)—Meeting and reunion (in conjunction with P.T.I. commencement exercises June 11), ALUMNI ASSN. OF PHILADELPHIA TEXTILE INSTITUTE; meeting on P.T.I. campus, reunion-outing at Manufacturers Golf & Country Club, Oreland, Pa.
June 10-12 (F-Sa)—Annual outing, PIEDMONT SEC., A.A.T.C.C., Mayview Manor, Blowing Rock, N. C.
June 16-18 (Th-Sa)—Annual convention, S.T.A., Mayview Manor and Green Park Hotel, Blowing Rock, N. C.
June 23 (Th)—TEXTILE DIV., AMERICAN SOCIETY OF MECHANICAL ENGINEERS (in conjunction with A.S.M.E. meeting June 20-24), Hotel Statler, Boston, Mass.
June 25-July 10 (Sa-Su)—INTERNATIONAL TEXTILE EXHIBITION, Brussels, Belgium.
June 27-July 1 (M-F)—Annual meeting, AMERICAN SOCIETY FOR TESTING MATERIALS, Chalfonte-Haddon Hall, Atlantic City, N. J.
*June 30 (Th)—Conference, TEXTILE SUBCOMMITTEE, A.I.E.E., Ocean House, Swampscott, Mass.
July 29-30 (F-Sa)—Outing, SOUTH CENTRAL SEC., A.A.T.C.C., Lookout Mountain (Tenn.) Hotel.
Aug. 22—Sept. 9 (M-F)—INTERNATIONAL WOOL TEXTILE RESEARCH CONFERENCE, Sydney, Geelong and Melbourne, Australia.
Sept. 6-17 (Tu-Sa)—PRODUCTION ENGINEERING SHOW, Navy Pier, Chicago, Ill.
Sept. 8-9 (Th-F)—Fall meeting, THE FIBER SOCIETY, Massachusetts Institute of Technology, Cambridge.
Sept. 10 (Sa)—SOUTHEASTERN SEC., A.A.T.C.C., Ralston Hotel, Columbus, Ga.
Sept. 14-16 (W-F)—SOUTHEASTERN PERSONNEL CONFERENCE, Duke University, Durham, N. C.
Sept. 16-17 (F-Sa)—Annual meeting, COMBED YARN SPINNERS ASSN., The Homestead, Hot Springs, Va.
Sept. 20-21 (Tu-W)—CHEMICAL FINISHING CONFERENCE (sponsored by National Cotton Council of America), Chalfonte-Haddon Hall, Atlantic City, N. J.
Sept. 22-24 (Th-Sa)—National convention, A.A.T.C.C., Chalfonte-Haddon Hall, Atlantic City, N. J.
Sept. 29-30 (Th-F)—Fall meeting, SOUTHERN TEXTILE METHODS AND STANDARDS ASSN., Clemson House, Clemson, S. C.
Sept. 29-30 (Th-F)—Annual outing, CHATTANOOGA YARN ASSN., Lookout Mountain (Tenn.) Hotel.
Oct. 1 (Sa)—ALABAMA TEXTILE OPERATING EXECUTIVES, Thach Auditorium, Alabama Polytechnic Institute, Auburn.
Oct. 3-5 (M-W)—NATIONAL ELECTRONICS CONFERENCE, Hotel Sherman, Chicago, Ill.

- Oct. 13-14 (Th-P)—Annual meeting, NORTH CAROLINA TEXTILE MFRS. ASSN., The Carolina, Pinehurst, N. C.
Oct. 17-19 (M-W)—Fall meeting, NATIONAL COUNCIL FOR TEXTILE EDUCATION (American Textile Machinery Assn. as host), The Larches, Hopedale, Mass.
*Oct. 17-21 (M-F)—NATIONAL SAFETY CONGRESS AND EXPOSITION (sponsored by National Safety Council), Conrad Hilton, Congress, La Salle and Morrison Hotels, Chicago, Ill.
Oct. 27-28 (Th-F)—Annual convention, THE QUARTERMASTER ASSN., Conrad Hilton Hotel, Chicago, Ill.
Oct. 29 (Sa)—Fall meeting, TEXTILE OPERATING EXECUTIVES OF GEORGIA, Hightower Textile Building, Georgia Institute of Technology, Atlanta.
Oct. 29 (Sa)—PIEDMONT SEC., A.A.T.C.C. Hotel Barringer, Charlotte, N. C.
Nov. 3-4 (Th-F)—Textile electrical conference, AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS, North Carolina State College, Raleigh.
Nov. 10-11 (Th-F)—Annual meeting, CARDED YARN ASSN., Bon Air Hotel, Augusta, Ga.
Nov. 14-18 (M-F)—EXPOSITION OF POWER AND MECHANICAL ENGINEERING (under auspices of A.S.M.E.), Chicago (Ill.) Coliseum.
Dec. 3 (Sa)—Annual business meeting, SOUTHEASTERN SEC., A.A.T.C.C., Biltmore Hotel, Atlanta, Ga.
Dec. 5-9 (M-F)—EXPOSITION OF CHEMICAL INDUSTRIES, Commercial Museum and Convention Hall, Philadelphia, Pa.
Dec. 10 (Sa)—SOUTH CENTRAL SEC., A.A.T.C.C., Hotel Patten, Chattanooga, Tenn.

—1956—

- Jan. 30-31 (M-Tu)—Annual meeting, NATIONAL COTTON COUNCIL OF AMERICA, Biloxi, Miss.
Apr. 5-7 (Th-Sa)—Annual meeting, AMERICAN COTTON MFRS. INSTITUTE, Hollywood Beach Hotel, Hollywood, Fla.
*June 14-16 (Th-Sa)—Annual convention, SOUTHERN TEXTILE ASSN., Ocean Forest Hotel, Myrtle Beach, S. C.
Sept. 10-12 (M-W)—National convention, A.A.T.C.C., Waldorf-Astoria Hotel, New York City.
Sept. 10-15 (M-Sa)—PERKIN CENTENNIAL (sponsored by various professional societies and trade associations), Waldorf-Astoria Hotel, New York City.
Nov. 27-30 (Tu-F)—NATIONAL CHEMICAL EXPOSITION (under auspices of American Chemical Society), Cleveland (Ohio) Public Auditorium.

—1957—

- *Apr. 4-6 (Th-Sa)—Annual convention, AMERICAN COTTON MFRS. INSTITUTE, Palm Beach Biltmore Hotel, Palm Beach, Fla.
†Fall—National convention, AMERICAN ASSN. OF TEXTILE CHEMISTS & COLORISTS, Boston, Mass.

*Listed for the first time this month.

†Tentative listing.

‡Changed or corrected from previous issue.

(M) Monday; (Tu) Tuesday; (W) Wednesday; (Th) Thursday; (F) Friday; (Sa) Saturday; (Su) Sunday



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NO. 5

It's Becoming A Permanent Event . . .

The Cotton Producer Mill Tour

By HENRY LESESNE

THE vast raw cotton industry sprawls across the southern half of the United States, with the center of gravitation moving ever westward. From the level of the seed breeder, through the farmer, the ginner and the cotton merchant, this multi-billion-dollar industry is the economic livelihood in varying degree of millions of families. A fabulous U. S. industry, it produces about a third of the free world's supply of cotton.

And the cotton manufacturing industry—the spinning mills, the weaving mills and the finishing plants—consumes and processes in a normal year about 9,000,000 bales of the U. S. farmer's cotton, or about two-thirds of his annual production, compared with about 7,000,000 bales 15 years ago, and in so doing, it employs about a million and a quarter persons.

These thousand or more separate and individual plants that process cotton into yarns and fabrics are scattered over a fourth of the states, from Maine to Texas, but this highly competitive industry—and a big industry, taken collectively, by any yardstick you care to use—is largely concentrated in the Carolinas, Georgia and Alabama, which is a part of the older or rain-grown Cotton Belt.

And these spinning and weaving mills and finishing plants are only the beginning of a complex, many-segmented over-all industry that puts the farmer's cotton into the products used by the ultimate consumer. Beyond the spinning mill and the weaving mill lies another whole textile realm, scattered throughout the 48 states, made up of hosiery and underwear mills, cutting and sewing plants, manufacturers of laces, braids, sewing thread, narrow fabrics and countless other items.

In the wake of the westward trek of cotton production—one of the many facets of the revolution which has overtaken the broad cotton industry in recent years—most or many of the big cotton producers or the farm leaders in principal producing areas of the newer parts of the Cotton Belt have never even seen a cotton mill, let alone gone through one and observed the processing of their raw fiber into yarns or sheets or towels and the like.

Now, in the last two years, there has evolved a means by which growers and ginners and farm leaders from representative cotton-producing areas each year can come and see first hand what spinning and weaving mills and finishing plants are like, observe some of the problems involved in processing, and also observe some measure of the competition cotton is up against, since most of the mills weaving

synthetic fibers or the plants chemically producing such fibers are situated in the same general area.

It's known as the Cotton Producer Mill Tour and all indications are that it is to become an annual event, or a fixture within the industry. Each year there will be a new set of producers, ginners or farm leaders, of course, and each year, insofar as is practical, the area to be toured will be varied; or at least that seems to be the plan.

And that these tours are proving to be real eye-openers to the producer and other segments of the industry is indicated by the comment of W. T. Wynn of Greenville, Miss., current president of the National Cotton Council, who was among the several score of men and their wives who made the tour this year: "I wish every cotton producer in the United States could come and see these things and observe some of the mill industry's problems and their programs of research."

Or take the case of young Lon Mann, who comes from out in Marianna, Ark., and has spent his years growing and ginning cotton, and who was one of the several score producers and farm leaders who made the recent 1955 tour. After seeing what weaving mills and finishing plants do to



A. W. Fisher (left), vice-president and cotton buyer for Cannon Mills Co., explains how cotton is classed and graded, while Charles A. Cannon (right), president of Cannon Mills, looks on. Listening are some of the raw cotton producers and their wives who spent an entire day at Kannapolis, N. C., during the second annual tour sponsored by the American Cotton Manufacturers Institute.

the cotton produced on his big farm, he commented: "The visit has opened my eyes. I'll never complain any more about those \$4 price tags on my cotton shirts."

And at Cannon Mills in Kannapolis, N. C., where he and the others spent a whole day of the three-day tour, he heard C. A. Cannon, president of Cannon Mills Co., explain in the course of a luncheon talk: "From 35 to 50 per cent of our selling price of a towel or sheet or bath mat represents the cost of the raw product—cotton. Add to that the labor costs, the machinery costs, the amount we spend every year in advertising and you get an idea of the investment we have in the products before they are shipped."

At Kannapolis the cotton men from California, Texas, Arizona, New Mexico, the Mississippi Delta and the other parts of the Cotton Belt got a view of an integrated cotton mill operation—from raw cotton to finished product. Only four of the touring producers had ever seen a cotton mill before.

The tours, of course, are designed to give them as complete and as varied a picture as possible, within the allotted time, of the whole textile panorama. For instance, this year's tour included also a trip through the big Rock Hill (S. C.) Printing & Finishing Co. plant, the biggest operation of its kind in the nation, the 3,300 employees daily finishing more than two million yards of fine cotton and rayon cloth.

And also, just a few miles outside of Rock Hill, they spent several hours going through parts of the mammoth post-war Celriver Plant of the Celanese Corp. of America where, from chemicals, cellulose acetate continuous filament yarn and staple fiber are produced. Here, day and night, throughout the week, acetate is spun without halt, being the product of a continuing chemical process. Acetate fibers are spun from a chemical compound, cellulose acetate. Cellulose (wood pulp and/or cotton linters) is first reacted with acetic anhydride to make cellulose acetate, which dissolved in acetone forms the spinning solution which comes to the Celriver plant from other far-flung Celanese operations.

But if the cotton men "oh-d" and "ah-d" at this vast chemical fiber operation in the light of what it represented in the way of cotton's competition, they received reassurance a little later in the day, during a tour of Celanese's new \$5 million office building in nearby Charlotte, N. C., as the guests of K. C. Loughlin, Celanese vice-president and general manager of the textile division.

During a brief talk at a luncheon in the Celanese offices—biggest office building between Richmond and Atlanta—A. M. Dempewolf, Celanese market development manager, observed that this is the day of the engineered fabric and that combinations of acetate and cotton have actually opened new outlets for both fibers. "We're both in the fiber producing business and have a lot of common problems and interests in solving those problems," he emphasized, and cited as one of these the necessity of providing new consumer needs and desires brought on by radical changes in recent years in the pattern of American living.

The 1955 tour took the cotton men within only a relatively short radius of Charlotte, so-called "textile capital" of the world, and Charlotte was the tour headquarters. The start of the final day of the tour also included a stop at Fort Mill, S. C., just to the south of Charlotte, where the visitors went through the new, ultra-modernistic and ultra-functional offices of The Springs Cotton Mills, which represent many striking and original concepts in architec-

tural design and furnishings of the mills' president and general manager, Elliott White Springs. Colonel Springs was on hand to greet the cotton men and after leaving his office they were taken through the pilot plant in another part of the building. The trips out of Charlotte were all by chartered bus from the Barringer Hotel, tour headquarters.

On the first day of the tour, which took the visitors to Rock Hill, they were welcomed by Mayor J. Emmette Jerome of Rock Hill and W. H. Grier, vice-president and general manager of Rock Hill Finishing & Printing Co. Sadler Love of Charlotte, secretary-treasurer of the American Cotton Manufacturers Institute—and a native of Rock Hill, incidentally—also spoke briefly at a luncheon for the visitors at the Andrew Jackson Hotel.

The three-day visit to textile show-places in the Charlotte area got under way a little earlier in Charlotte when A. K. Winget of Albemarle, now president of the A.C.M.I., and board chairman of American & Efird Mills, made a brief talk, as did Robert C. Jackson of Washington, A.C.M.I. executive vice-president.

At the conclusion of the first day, the visitors were entertained at a dinner at which R. Dave Hall, secretary-treasurer of Stowe Thread Co., Belmont, N. C., spoke briefly, and F. E. Grier, president of The Abney Mills, Greenwood, and current A.C.M.I. vice-president, was master of ceremonies.

The speaker at the cotton men's final night in Charlotte was J. Craig Smith, president of Avondale Mills, Sylacauga, Ala., and outgoing A.C.M.I. president, and the master of ceremonies at the dinner was H. K. Hallett of Charlotte, former A.C.M.I. president and vice-president and general manager of The Kendall Cotton Mills. Mr. Smith in his address made the point that the loss of remaining U. S. textile markets or an increase in imports of foreign-made cotton goods must inevitably worsen the serious economic plight of both the mill industry and the cotton farmers alike, and Mr. Cannon, in speaking to the cotton men at Kannapolis, also touched upon the theme.

Mr. Smith observed that when goods are made here, the farmer knows his cotton is being consumed, but when the



Harry Cannon (right), executive assistant to the president of Cannon Mills Co., discusses some of the synthetic fabrics which were shown to cotton producers during the recent annual Cotton Producer Mill Tour. Examining one construction, containing no cotton at all, is William Rhea Blake (second from left), executive vice-president of the National Cotton Council of America.

foreign mill makes the goods, the chances are only about 25 per cent that it will be U. S. cotton, since free-world consumption outside the United States is running at the rate of about ten million bales, and the United States is exporting around 4.5 million bales.

While the leaders in the raw cotton industry got a panoramic view of the Southeast's multi-fiber economy during the tour, it was really at Kannapolis, on the second day, that they learned about the cotton mill and its problems, in viewing the operations of the integrated Cannon Mills operations. It was here, as one of them remarked, that they really got an education in cotton. The day-long tour of Cannon Mills got under way in the cotton department. The cotton men easily understood the language of A. W. Fisher, vice-president of Cannon Mills in charge of cotton buying. They knew, for instance, what he meant when he mentioned cotton being "burned up" by ginners in trying to speed up the drying process on cotton brought to them in improper condition. They understood, too, when he mentioned cotton being "beaten up" by excessive use of machinery in an effort to boost the class of trashy cotton.

And they heard how this sort of cotton is much more difficult and more expensive for the spinners to process, and they were made to see what co-operation in correcting these practices could mean to the benefit of all. And then, at a luncheon, they heard their host, C. A. Cannon, president of Cannon Mills, cite figures showing that under "government interference," U. S. cotton acreage has been cut in half, exports have shrunk sharply, and so have the number of spindles in domestic mills. A further reduction in U. S. tariffs on cotton goods would mean a further loss for the American cotton farmer, he said.

The Cotton Mill Producer Tours are sponsored by the American Cotton Manufacturers Institute, the mills' central trade association, representing both Southern and New England mills, with headquarters in Charlotte. The idea of these tours evolved in the Spring of 1954 when the first one was conducted in the Clemson, S. C., area. The National Cotton Council was holding its annual meeting in Atlanta that year and so the A.C.M.I. invited a number of producers and farm leaders and their wives to continue on to Clemson by special car following the N.C.C. convention and spend three days viewing textile mill operations.

In the Clemson area, incidentally, there is not only one of the largest integrated cotton mill operations in the world (the Utica-Mohawk Plant of J. P. Stevens & Co.), but plants where almost every conceivable kind of fabric is made or finished—wool, the cellulosics, the new man-made fibers, even glass and aluminum-coated fabric. And nearly all of the cotton men making the tour, it developed, had never been inside any textile plant before.

The idea of the mill producer tour was so enthusiastically received that it was decided to continue them. For one thing, it has been cited often that the textile manufacturing industry has undergone a dramatic revolution in recent years, and there is no better way to realize this than actually to tour textile areas.

In sharp contrast to the single-fiber type of mill or company—that is, the strictly cotton mill or woolen mill—there are now countless multi-fiber operations or companies. Advances in science and technology have brought about a streamlining and telescoping of manufacturing steps and in the process it has shown mill engineers how to adapt their machinery to handle not just one raw material, but several

types of fiber, on the same system of machinery—or to spin and weave blends of fibers.

So, as manufacturers have often observed, cotton's first point of competition—the mill door—is increasingly becoming its most vital point of competition. Knowing your customer is axiomatic in business and leaders in various segments of the cotton industry have long expressed the view that cotton can hope to compete in domestic and foreign markets only through a better understanding of mutual problems. And the mill producer tours are considered one means of better bringing about such an understanding.

Textile leaders consider it important for producers and other segments of the industry to see and observe the operations and problems of the domestic mills, since mills in this country use U. S.-produced cotton almost entirely, and are by far the farmer's best and most important customer. And in trade circles particular significance was attached to the tour this year because of the vital decisions faced concerning a foreign trade program and other matters which could greatly damage not only the cotton mills but the entire cotton agriculture in the United States.

Biloxi Highlights

Alabama Association Names Fred Phillips

ADVANCEMENTS almost unsuspected a few short decades ago lie in store for the nation's textile industry as a result of man's recent advancements in the fields of science and technology. That was the forecast made by Herbert L. Werner of New York, senior partner of Werner Textile Consultants, before the 54th anniversary convention of the Alabama Cotton Manufacturers Association in Biloxi, Miss., in mid-April.

The association also heard Fred A. Hartley Jr. of Washington, D. C., co-author of the Taft-Hartley Act, call for a strengthening of some of that act's provisions and defend the right of employees not to be forced to join unions if they did not so desire. Mr. Hartley is now president of the National Right-to-Work Committee.

The association elected Fred F. Phillips, president of Buck Creek Cotton Mills, Siluria, new president. He succeeds T. H. Floyd, vice-president of the Opelika Mfg. Corp., Opelika, who was named chairman of the board. R. C. Moyer, manager of The Linen Thread Co., Blue Mountain, was elected vice-president, and F. M. Lyon, president of the Opp and Nicolas Cotton Mills, Opp, was named treasurer. The group re-elected Dwight M. Wilhelm, Montgomery, as executive vice-president, and Mrs. Sara Davenport, Montgomery, as secretary.

Mr. Floyd, in the president's annual address, said that in its original form H. R. 1 would have sounded the "death knell for some of our own basic American industries in the holy cause of fighting Communism in Asia." President

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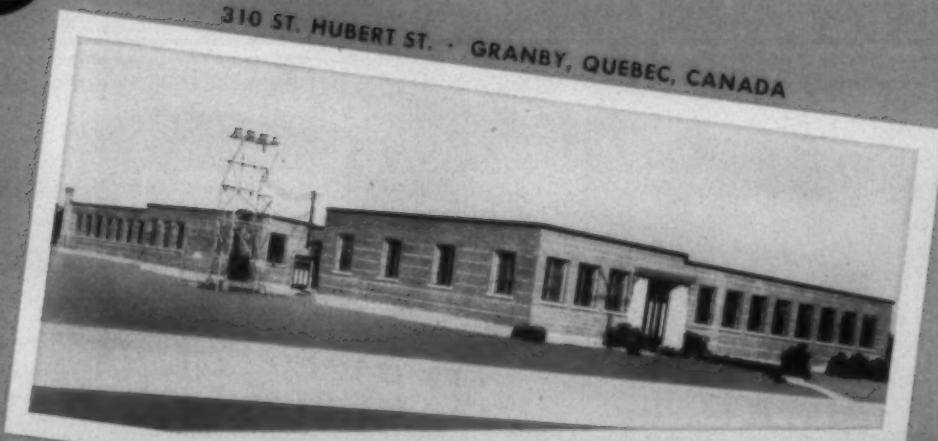
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Floyd termed it "absurd" to "reason that we can doom our own tax-paying, income-providing textile industries, and still feel that we can be secure, in either peace or war." He added:

"Standing right here about one year ago at our 1954 annual meeting, Craig Smith made a most prophetic address. Everything he said has come true and our most concerted efforts to turn the tide have not been crowned with much success, unless the A.C.M.I.-suggested amendments sponsored by Alabama senators meet with more success than did the original bill in the House of Representatives. Actually some form of import quotas should be worked out, but that will be difficult in passage and will take time." (In this same connection, the association unanimously adopted a resolution in which it was asserted that passage of H. R. 1 without amendments to give some protection to the textile industry would spell the industry's doom.)

Mr. Floyd also sharply criticized the crop reporting of the U. S. Department of Agriculture. He said the report of last September in particular was "extremely inaccurate" and had contributed to the "present unhealthy market situation." Pointing out that some persons had suggested that the U.S.D.A. eliminate the August and September report entirely, Mr. Floyd said this could be a wise step "unless the department can give a better performance than in 1954."

He listed as another problem which had plagued the industry for the last two years "the depressed futures market and the high basis." He said certain changes in the contract were in order, adding: "A micronaire minimum will be required starting with the May 1956 contract. This is a step in the right direction but, in many people's opinion, is not strong enough to do the job. Some think the basis of the contract should be changed from middling 15/16 to middling one-inch, and this could do much to solve the dilemma. In addition, a penalty could be assessed against cotton remaining in the certificated stock over any unreasonable length of time.

Turning to problems even closer "home," President Floyd criticized sharply the fiscal proposals of Gov. Jim Folsom of Alabama and his administration. He urged that a thorough study be made of state needs with resulting recommendations about taxation by competent authorities. He also forecast a "head-on battle" in the regular session of the Alabama Legislature when efforts will be made to repeal the state's right-to-work law. He charged: "Once more a heavily subsidized effort is being made by the grasping hands of the last monopolists left—the labor monopolists. Bringing with them hollow promises of the 'blessings of unionism,' they have difficulty concealing the farce in the face of the telephone and railroad strikes. This is where our powerful governments take it on the chin, lying down." The association itself adopted a resolution condemning the state administration's tax proposals and calling for a halt to them until the citizenry as a whole had been fully informed about the entire tax program and a study had been made of state needs. The resolution contended that the program was keeping industries from Alabama and "clouded" the future progress of the state.

In his address, Mr. Werner forecast sharp changes in the textile industry in the next 20 years, chiefly as a result of automation and the introduction of new mechanical processes worked out through co-operation of the textile manufacturers and the machinery producers. At the same



Moyer, Floyd, Phillips, Wilhelm, Miss Davenport

Named as executives of the Alabama Cotton Manufacturers Association for the next year, during the group's convention at Biloxi, Miss., were: R. C. Moyer, vice-president; T. Holmes Floyd, chairman of the board; Fred F. Phillips, president; Dwight Wilhelm, executive vice-president; and Miss Sara Davenport, secretary.

time, he warned that certain textile producing countries abroad have definite cost advantages over the United States and that adequate protection of the industry in this country is imperative. The domestic industry's greatest strength, he asserted, lies in its "American-type optimism, individualism, versatility and relative freedom from restraint and rigidity." These assets, he said, must be preserved.

He predicted that the textile industry would grow with the economy of the United States generally in the coming few years and that this growth might well surpass anything experienced thus far. He said the principal elements involved in this growth were a long-range population up-swing, the continuing rise in the present high standard of living and the probability of a continuing growth in productivity, or average output per man-hour.

The four million babies born each year, he said, comprise a market of 400 million yards of goods annually for manufacturers in only one area of textiles. Increasing longevity means an additional supplement to the market. Based on a survey for *Fortune* magazine looking to 1959, Mr. Werner pointed out, consumption of clothing should increase an average of at least three per cent a year, and this is faster than the apparel market has grown over post-war years. Total apparel expenditures by around 1959 may rise by some \$2.5 billion. A potential market sales volume of around 580 million yards a year for non-apparel textiles also is indicated by the continued high level of building activities.

In addition to a larger market, the textile consultant also foresaw radical changes in manufacturing and office methods in a relatively short time. He said that the most outstanding effect probably will result from "automation." He said automation, in simple and broad terms, implies an operation such as this: "The raw material is fed automatically into the production machines at a predetermined rate, has a series of operations performed on it without the need for human intervention, and is delivered as a finished unit ready for use." Although the process is not a new one, it is expected to find increasing application in the textile field.

He forecast, too, a "startling revolution in methods of

storage and distribution," and a reduction of administrative costs through new business machines and data processing equipment. These will enable the need for prompt and adequate information to be met. Consequently, management will find itself in the years ahead in position to spot more quickly business upswings and act more promptly on them and to locate downturns and adjust production to minimize adverse effects.

The major challenge facing the textile industry today, however, Mr. Werner said, is that of obtaining a larger share of the consumer dollar. It is time, he added, for the industry to "stop thinking only in terms of cotton versus wool versus synthetics and take into account that industries outside our own are real competitors. Are we not vying with the automobile, the television set, and the washing machine when it comes to disposable consumer income? Let us be frank! Why is the automobile industry able to create a demand for new cars among Americans even when their old models are still serviceable? Why shouldn't it be possible to promote textile consumption and motivate the consumer in such a manner that to be among the fashionably dressed American families is as important a social asset as to have a brand new car, equipped with all the extras and painted in all colors of the rainbow?"

Mr. Werner said there were two necessities for formulating any constructive program of attracting a greater share of the consumer dollar. In the first place, it must be industrywide and receive the support of all segments "from the cotton grower to the dress manufacturer and distributor at the end of the line." In addition, "it must have as its focus that sometimes vexing, often fickle but always important individual—the consumer. In my judgment, he must be defined more accurately, studied more intimately and motivated more effectively."

This, he continued, can be achieved with a threefold approach: more efficient market research and analysis; thorough studies of consumer motivation and buying habits; and a campaign of institutional advertising and promotion. The tools to carry through with a program of this type are at hand, the speaker declared. They include the economists, statisticians, marketing experts, public relations men, psychologists and promotion specialists. He concluded: "If this were something beyond human control, there would be little point in talking about the future of textiles. However, I am convinced that the future is what we make it; that it is subject to our own volition. You and men like you in our vast and complex industry will tackle this task."

Mr. Hartley won a tremendous ovation when he challenged the statement by Alabama's Governor Folsom to the effect that the right-to-work law was a contributing factor in the Southern Bell and Louisville and Nashville railroad strikes. He charged that the governor was entirely wrong and that the strikes had nothing to do with the right-to-work law. In fact, he said, the L. & N. strike revolved around a compulsory insurance plan which the union wanted to "inflict" on its members. He challenged those who claimed that the right-to-work laws were "immoral" and declared that these persons were "strangely silent" about the violence which has taken place during the strikes.

As for the Taft-Hartley Act itself, which he co-authored in Congress, Mr. Hartley said that instead of being a "slave labor" law, it actually was too mild and several sections needed strengthening. He forecast that nothing would be

done to change Taft-Hartley in this session of Congress and said that the forthcoming merger of the C.I.O. and A.F.L. is "more political" than in the interest of labor.

The National Right-to-Work Committee, he told the manufacturers, is not anti-union. It is designed to help protect the right of American workers to hold jobs in American industry without joining their unions and paying dues and assessments unless they so desire. Eighteen states today have right-to-work laws. Attempts to repeal them in Tennessee and Alabama already have failed. However, he added, the governors of some Southern states have "Vice-Presidentialitis" and are out looking for labor votes. He named specifically Alabama and Tennessee.

He said his committee believes that if workers are free to choose whether or not they will join a union, the evils of unionism will disappear. But, he added, the big unions have aligned their forces not only against state right-to-work laws but also in an effort to repeal Section 14 (b) of the Taft-Hartley Act. This is the section that gives the states the right to legislate in this field. Consequently, the issue of compulsory unionism is rapidly approaching a showdown, both at state and national levels.

During the convention Mt. Vernon-Woodberry Mills at Tallasseee was presented the trophy for winning first place in the weaving division of the annual Textile Safety Contest. B. G. Stumberg accepted the award on behalf of the employees. The Standard-Coosa-Thatcher plant at Piedmont won the first-place trophy in the spinning division, and the award was accepted by John Harrison, vice-president in charge of operations.

The association adopted unanimously a resolution up-



Routh, Miss Strader, Cowan

A SCHOLARSHIP to the University of North Carolina's School of Nursing recently established by Burlington Industries Foundation has been awarded Celia Jo Strader of Greensboro, N. C. The scholarship, awarded on a competitive basis, is one of two such awards recently established by the Burlington Foundation. The scholarships, worth \$500 each, are to be awarded annually, one in Guilford County and the other in Alamance County, North Carolina. The competition is based on high school scholastic records, tests, references and personal interviews. Selection of the winners is made by the scholarship committee of the university. Miss Strader, a senior at Greensboro Senior High School where she is an honor student, will enter the university this Fall seeking a B.S. degree in the four-year School of Nursing. Winner of the other scholarship was Miss Barbara Faye Miles of Burlington, N. C. Miss Strader receives congratulations, above, from A. P. Routh, principal of Greensboro Senior High School, and J. C. Cowan Jr., vice-chairman of the board of Burlington Industries Inc.

holding the stand of the American Cotton Manufacturers Institute in its opposition to passage of H. R. 1 in the form in which it originally passed the lower house and saying that such a bill would endanger the entire textile industry. Another resolution assailed the Alabama State Administration's fiscal policies and tax program, charging that the program "clouded" the future of the state. The manufacturers asked a halt to any new taxes until after a study had been made of state needs and the citizens had been presented the program as a whole instead of piecemeal.

The association heard M. Earl Heard of West Point Mfg. Co., chairman of the Alabama Textile Education Foundation, report on the tremendous progress made at the School of Textile Technology at Alabama Polytechnic Institute under the leadership of Cleveland Adams, the school's head since 1952. Mr. Heard said that although much progress had been made, many needs remain. The Alabama Textile Education Foundation has contributed substantially to the school and hopes to add to its contributions with the support of the entire industry throughout the state.

Three new association directors were elected: Fred Moore, Florence Cotton Mills, Florence; Cliff Hall, Danville Yarn Mills, Bon Air; and W. K. Wilder, Goodyear Decatur Mills, Decatur.

One of the entertainment highlights of the meeting was the annual Welcome Party and Linthead Calendar Ball. At the latter, delegates, their wives and convention guests appeared in costumes depicting events of their choice. James Arrington, Collins, Miss., newspaper editor and humorist, addressed the annual banquet, over which President Floyd presided.

The Alabama association now has its own office building in Montgomery. The 1956 convention will again be held at Biloxi in April.

Report From Boca Raton

M. M. Bryan Jr. New C. M. A. G. President

ELECTION of Morris M. Bryan, Jr., as the second youngest man ever to head the group climaxed the 55th anniversary convention of the Cotton Manufacturers Association of Georgia at Boca Raton, Fla. Mr. Bryan, president of The Jefferson Mills Inc., with plants in Jefferson and Crawford, succeeded George E. Glenn Jr., president of Exposition Cotton Mills Company, Atlanta, at the association's helm. He has been an indefatigable worker in the activities of the association for some years. He was elected its treasurer in 1953 and its vice-president last year.

The association heard retiring President Glenn declare that the state's mills had done an outstanding job in meeting their community responsibilities and its responsibilities to employees. "I don't mean to say that we should be boastful over what we have contributed to the economy and to the civic and social life of our communities," he said, "but I think we should be aware of how well we have fulfilled

our obligations and what a long way we have come within the last 30, or 20 or even ten years."

He pointed out also that the textile mills comprise the state's largest employer of labor, that their combined payrolls total about \$275,000,000 a year, and that they are the state's largest taxpayer. "But we are doing more than producing goods and providing employment and consuming cotton and pouring dollars into the channels of services and trade," he added. "We are also helping to build character and develop a better citizenry."

President Glenn also outlined some of the problems which the industry has been facing, including the threat of lower tariffs which would, he said, imperil the industry's own domestic markets and the jobs of its employees. He said, too, that with the national wage and hour law in effect, "it is difficult to understand the necessity for the Walsh-Healey statute."

He termed overproduction as "probably the major factor involved in the textile recession periods." He expressed the opinion that as individual businessmen the textile executives should give more thought to determining what the consumer wants, needs and will buy, continuing: "It seems to me that one of our primary needs right now is for a continuing program that will help us determine not only what our customers want but research that also would indicate to us what the consumer needs, what the consumer prefers, and what the consumer will pay for."

Governor Marvin Griffin of Georgia told the convention that the textile executives of the state could and should play a leading role in helping the state to attract desirable new industries. "I would like to request now your co-operation in helping to provide leadership for this great adventure in progress," he said. "By reason of your long years of experience here in our state and in the South, you have a knowledge of our way of life, of our traditions and of our people. Your industry has set an outstanding example of good citizenship in your relations with your employees and with the communities in which your plants are operated. When I suggest we tell businessmen the country over about our advantages and our resources, I do not, of course, mean to suggest that our communities 'go overboard' in attempting to entice new industries that will not prosper in their midst, or that will prove undesirable as corporate citizens. We want the type of industries that will help build Georgia—not exploit it or its people. We seek industries which will fully utilize the skills and not exploit the reservoir of capable workers who have proved their skill and adaptability in many lines of manufacturing."

Clarence E. Manion, former dean of the law school at Notre Dame University and now a partner of the law firm of Doran and Manion, South Bend, Ind., warned the manufacturers that "through unchallenged, unconstitutional and profligate spending beyond its tax income, the United States has been reduced to complete insolvency." He added: "In unconstitutional defiance of states' rights, all but absolute power has been concentrated in Washington, thus paving the way for what Woodrow Wilson prophesied would be death for human liberty. The value of the dollars that you fight for in the competitive markets has shrunk 50 per cent in the past 15 years. At that rate they will be completely valueless 15 years from now. While the Secretary of the Treasury forecasts a three billion dollar deficit for the current fiscal year, the President announces a 3½ billion dollar spending program for the rehabilitation of the outside world—yet no body of businessmen asks him what he expects to

use for money or how he expects this continued wasteful transfusion of our nation's lifeblood to do anything but destroy the solvency and sovereignty of the United States. While the United States is strong, solvent, sovereign, free and independent, Communism can attain no permanent victory anywhere on earth. The fact of a free, solvent, constitutionally-governed United States with the highest paid per-capita standard of living ever attained on earth gives the effective lie to the Communist false pretense that only in a state of slavery can people be fed, housed and clothed. The first objective in the fight against the conquest of the world is to keep the United States free, strong, solvent and independent. For the past ten years we have put this objective last instead of first. For ten years we have pursued 'Operation Suicide' for the United States. We have become so obsessed with the chimera of a so-called 'Free World' that we have completely and officially sabotaged the free United States."

He charged that the American people had remained complacently silent "during this whole process of national destruction," adding: "Let us hope that the next great medical discovery will be a cure for the cancerous complacency that has benumbed the American people to the progressive destruction of our constitutional freedom and national independence."

Also during its business sessions, the association heard Secretary Frank Carter report an excellent year for the personnel managers, office executives and cotton buyers divisions of C.M.A.G.

In his report for the agricultural committee, Chairman Z. B. Lane Jr., plant manager of the Clarkesville Mill, Clarkesville, urged that the manufacturers in their own communities become more closely allied to the Georgia Farm Bureau "and show through our efforts that we are willing to co-operate and understand their problems, and to assist them in any way we can."

The report of the safety contest committee, prepared by Chairman Walter H. Gosnell, then superintendent of the Eagle & Phenix Division, Fairforest Company, Columbus, showed that Georgia textile mills had reduced the accident frequency rate each year since 1949—a reduction of 26.4 per cent in six years. He also disclosed that nine plants in the state had worked a combined total of 8,038,450 man-

hours without a single lost-time accident during the past fiscal year.

New association officers elected in addition to President Bryan were: Henry McD. Tichenor of The Walton Cotton Mills Co., Monroe, vice-president, and George Hightower of Thomaston Cotton Mills, Thomaston, treasurer. T. M. Forbes, Atlanta, was re-elected executive vice president, and Frank L. Carter, Atlanta, was re-elected secretary. Both the latter two were given a tremendous ovation for their outstanding leadership over the years.

Named new directors were: Robert Train, Bibb Mfg. Co., Macon; W. C. Vereen Jr., Moultrie Cotton Mills, Moultrie; L. L. Jones, Jr., Canton Cotton Mills, Canton; A. C. Link, United States Rubber Co., Hogansville, and Joe L. Jennings, West Point Mfg. Co., West Point.

Expect Supima Cotton Apparel In '56

Women's apparel made from Supima cotton, trademarked name for American-grown extra long staple cotton, probably will be introduced to the fashion market in Spring and Summer lines for 1956. In predicting Supima's debut in consumer products, Mary Alice Stewart, manager of the Supima Association's New York promotion office, said the fiber has been accorded excellent initial reception by leading mills and converters.

"Mills and converters are now beginning to work with the new cotton," Mrs. Stewart said. "In spite of the close time element, several top houses are optimistic about their ability to introduce Supima cotton fabrics in their 1956 Spring and Summer lines." In the women's wear field, Supima fabrics are expected to make their appearance in the high-fashion lines of topflight name designers, Mrs. Stewart said. Progress likewise is being made toward the launching of Supima in men's wear. High quality men's shirtings probably will mark the fiber's entry into this market.

The Supima Association, which opened its New York offices March 1, is now formulating plans for advertising and merchandising programs underscoring the introduction of Supima to the market in both women's and men's wear. Mrs. Stewart said that while initial emphasis is being placed on the women's and men's apparel markets, the long-range goal of the association calls for developing outlets for Supima cotton in both children's wear and high-quality home decoration textiles, as well as in a number of apparel accessories fields.

The Supima Association was organized last Fall with the objective of promoting increased consumption of American-grown extra long staple cotton. Its membership includes cotton growers, ginners and other interests in West Texas, New Mexico and Arizona. The industry's organization movement was given impetus by the development and commercial introduction of the new high quality, high-yielding variety of S-1 over earlier American extra staples made possible the industry's request for reduction of the support price from 90 to 75 per cent of parity. The new support price goes into effect Aug. 1. Spinning tests, conducted through an industry-wide clearing house headquartered at the National Cotton Council in Memphis, demonstrated that Supima possesses excellent quality characteristics. High tensile strength, smoothness, uniformity of staple length and luster were among the qualities recorded.



Forbes, Bryan, Tichenor, Hightower, Carter

Officers of the Cotton Manufacturers Association of Georgia for 1955-56, elected at the organization's 55th annual convention, are: T. M. Forbes, executive vice-president; Morris M. Bryan Jr., president; Henry McD. Tichenor, vice-president; George Hightower, treasurer; and Frank L. Carter, secretary.

Opening, Picking, Carding & Spinning

THE MILL OF TODAY

By ROBERT Z. WALKER

Part 42, Section One (Facts About Yarn Carriers)

The last discussions centered upon spinning spindles, with prior articles dealing with the ring and traveler, so that all of the mechanical assemblies which function to twist and wind yarn upon a bobbin have been analyzed. There still remains one important item, the yarn carrier upon which the yarn is held, to be analyzed in order to cover the fundamentals of twisting the yarn after it has left the front rolls of the drafting element. Later discussions will delve into the drafting of fibers, to complete the survey of the entire spinning process.

THE yarn carrier—and it can be either a quill for filling, a wooden bobbin, or a fiber composition or wooden tube for warp—can at best be regarded as a necessary evil. The only function of the bobbin is that it acts as a receptacle for yarn as it is spun. Warp and sales yarns are immediately rewound at considerable expense, and even filling is rewound in some modern mills before being placed in the battery box of the loom. Bobbins are expensive, require continuous inspection and rejection if damaged, and this increases the cost of spinning. The bobbin, in providing a means of packaging and transporting yarn for this short period, exacts a high cost which is extremely difficult to measure accurately in its entirety. In addition to the original cost, and the cost of maintenance, the bobbin is a factor in power consumption.

On the other hand, the bobbin saves money for the mill because it permits the use of big rings and large packages. The bobbin increases the diameter of the spindle blade at the center of the ring so that a large ring can be used without decreasing the angle of the yarn past the point at which the strain would exceed the yarn's breaking point. If it were not for the bobbin, say if only a paper tube was slipped over a thin spindle blade, the ring would have to be reduced in diameter to preserve the required yarn angle. Summing up, the bobbin is a vital necessity which is expensive; the concern here is to discuss means of keeping this expense at a minimum, and of getting the full money's worth.

The gravest concern of the bobbin manufacturer is also the expense of wooden bobbins. Bobbins must be made of good wood—a hard wood such as maple, without splits, cracks, or knots—and a large block or blank greater than the largest diameter of the finished bobbin must be used. This demand for good wood, competing against all other consumers of hard wood in other fields, has led to steadily

increasing prices of raw material as the supply becomes scarcer. The manufacturers have either been reluctant or unable to pass along all of the increased costs to the mills and so have been faced with a decreasing operating margin.

This operating margin is further reduced because of the mills' insistence upon, and continued search and demand for, increased speeds, larger package sizes, and finer yarn counts—all on the same size spindle. There are known cases of mills which have gone from a $7\frac{3}{8}$ -inch bobbin, running at a spindle speed of 8,300 r.p.m., to a $10\frac{1}{8}$ -inch bobbin to be run at a spindle speed of 9,200 r.p.m. The mills have then demanded bobbins to fit the same spindle, which was probably not designed for the higher speeds, greater overhang and increased load, and to have the bobbins operate as smoothly as under the original working conditions. This demand has probably been made in full consciousness of the fact that an out-of-balance condition exists which prohibits complete satisfaction. The result is that the bobbin manufacturer, who must try his best to suit the mill, reduces his working tolerances throughout and therefore is penalized by having a higher percentage of waste in the form of factory rejects.

Mills should remember, in considering the cost of a bobbin, that a bobbin is a precision part. In this light, they can see that they are purchasing a carefully-made unit for usually less than ten cents; in most cases the price will be around $8\frac{1}{2}$ cents, and this includes rings, bushings and finish. Standard measurements of length, base and barrel diameter, ring size and all other specifications are usually held to plus or minus .005 inches on filling and warp. Even on card bobbins, that is, for roving frames, tolerances are held to plus or minus .010 or .012 inches. In the case of the Saco-Lowell SG-1 spinning frame the tolerances are held to plus or minus .003 inches for dimensions and plus or minus .005 inches for others.

This situation is serious, but on top of this is imposed another problem and another cost which is neither completely necessary nor justified. The latter is the multitude of bobbin patterns and styles which are specified by the mills. A reliable estimate, based on actual experience, is that it costs a bobbin manufacturer a minimum of \$100 to set up, make new tools, and produce a sample bobbin. Probably a more accurate cost would be \$150, rather than \$100, if all expenses of engineering, designing and full overhead were included.

The present lack of standardization in bobbin styles, models and patterns has been costly to both the manufacturers and the mills. The only benefit received from the increased cost is the personal satisfaction of the individual mill man who has ordered and been given the exact bobbin that he believes will run best for his mill. At his insistence the standard bobbin for the particular spindle and ring has been

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Note this: We show here the percentage increase of sliver when a conversion is made. Take, for example, a 12" x 36" coiler. We'll convert it to any one of the following sizes and here is what you'll get:

Up to This Size	Percentage of Sliver Increase
14" x 36"	60% to 65%
14" x 42"	100% to 105%
15" x 36"	100% to 105%
15" x 42"	120% to 125%

This shows the perfect lay of the sliver in can after coiler conversion from a 12" x 36" size to a 15" x 42" size.



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This coiler was converted from a 12" x 36" size up to a 15" x 42" size, increasing the amount of sliver in can by 120% to 125%.

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altered to change the seating slightly, or the step is a little different, or the taper is longer or shorter. In most cases, probably the standard bobbin would be as satisfactory or the difference would be insignificant. However, the bobbin manufacturer agrees to make the change because of fear of losing the order if the alteration is refused. The manufacturer must now have a new back knife machined, and this is expensive.

The back knife is the cutting tool, precision-made of the finest tool steel, which forms the shape of the bobbin in the cutting operations. A back knife will usually cut only one bobbin shape and therefore the manufacturer is faced with accumulating an ever-growing inventory of expensive knives. Some of these knives are used but once, such as in cases where the mill orders a special bobbin and changes its mind about certain dimensions when later reordering. This unnecessary expense is sometimes borne by the mill in the form of increased bobbin costs; but usually by the manufacturer in the form of smaller operating profits due to absorbed overhead.

Because of the important effect of the bobbin on the operation of the spinning room, and because bobbin purchases are a significant cost factor in spinning, a thorough investigation into the design, selection and use of bobbins is more than justified at this time. The bobbin appears to be a simple item to the layman, and even experienced spinners do not always appreciate the advances which have been made in both construction and design in the last decade. There have been fierce controversies over design, based on both theoretical and practical principles. The bobbin of today is indeed far different than the older bobbins in every respect except the material from which it is made.



Various stages in the manufacture of wooden bobbins, from rough blank to finished article. The last bobbins on the right are split to show internal dimensions.

Wood is still the best material for most bobbins, with the possible exception of fibre "paper" tubes for some types of warp spinning. Paper tubes have been developed to the point that they are excellent for warp spinning, and this will be discussed later. Plastic bobbins may some day replace wood. This appears a logical move in view of the progress being made in the science of plastics and the increasing cost and scarcity of suitable wood. However, this substitution still appears to be a long way off because plastic bobbins so far are not as true-running as wood. They are more easily broken if abused, and are apt to become warped and stick on the spindle; and, they are still more expensive than wood. The greater expense is due to the lack of standardization mentioned before. In the case of the wooden bobbin, a new back knife must be machined; in plastics, a new and very expensive mold must be manufactured.

Rock maple is the most desirable wood for bobbins; the second is birch, then beech, followed by gum which is the least desirable but still acceptable. The closeness of the grain, straightness of fiber, and density of rock maple make it the best bobbin wood as it is long wearing and can be manufactured to close tolerances. In addition, the close, tough grain structure lends itself to the very smooth finish needed for a yarn carrier.

Rock maple, coming mostly from the northern United States and Canada, is rapidly being depleted, and is being replaced by birch. Birch is a good hard wood and is claimed by some to be better than rock maple. This claim is based on the fact that birch has wood cells much larger than maple. These cells can absorb more moisture than maple and, in doing so, can prevent distortion. Rock maple, on the other hand, is stated to have a tendency to warp if moisture is absorbed. The warping will pull the bobbin off center, and the resulting vibration will cause spindle wear, vibration, and oil pumping due to the unbalanced running condition.

Beech is also satisfactory for bobbins as it has a close, straight grain, and is a tough wood. Gum, coming from the Southern states, is too soft for use in spinning bobbins but may be used for roving. Gum is susceptible to moisture and may warp if used where the humidity is high.

It is not necessary to go into the manufacturing procedures here except to note that each bobbin is checked and rechecked as it undergoes each successive operation. The blanks are first air-dried, then kiln-dried under exacting controls to maintain predetermined drying rates, so that the final blank will contain a certain moisture content. At each inspection point, bobbins are rejected if the dimensions are not within close tolerances or if any inherent defects in the wood are uncovered.

What is of interest to the mill man is the type of finish applied to the bobbins which he orders. The selection of the proper finish is up to the mill, aided by the recommendations of the bobbin manufacturer, and must include considerations of cost and the conditions of the specific mill. The cost of the various types of finishes varies, dependent upon the type, and will be reflected in the cost of the bobbin to the mill. However, as a good finish will give many years of service while a poor finish for the particular mill condition will continue to give trouble, the initial bobbin price should be disregarded and the best finish obtainable should be specified.

Two main types of finishes are in general use today, enamel and a plastic lacquer. Modifications and combinations of these finishing ingredients and methods are found

where extraordinary conditions must be met, but usually one of the standard finishes will prove adequate for most mills. Among these are air-drying varnish, synthetic gums and special waterproofings. One other finish, the cheapest in terms of initial price, is available. This is the plain finish in which the wood is sanded until smooth and then left in the natural state. Bobbins used like this are very apt to absorb moisture and warp, scar easily and deeply, are prone to split and will not stand hard use.

An oil finish, used until recently, consisted of dipping, rolling or soaking the bobbin in either linseed oil or a special mixture of oils of this type until the pores of the wood were filled. The main drawback to oil finishes was that the bobbins were not given a hard protective coating. This was overcome, but oil is not generally used for cotton or synthetics. It is still used for wool.

Fine yarns, bleached or mercerized, obviously should not be spun on freshly-oiled bobbins as the oil will stain or soil the yarn. Shellac was once preferred over the oil finish and was acceptable for any use except when the yarn was steamed or conditioned while still on the bobbin. Shellac has a tendency to become sticky when the humidity exceeds 80 per cent, and this is particularly true when the temperature approaches 100°F. In applying a finish of this type two or more coats of pure white or orange shellac were mechanically applied to seal the pores. This did provide an economical and durable surface, but the method has now been discarded for better finishing materials.

For years the best and most expensive finish was enamel. This finish is still used but has been greatly supplanted by plastic finishes. The enamel is baked onto the bobbin to form a tough, smooth, and moisture-proof coating. Enamelled bobbins are suitable for steaming or conditioning as the finish is able to withstand temperatures as high as 180° for

a period of 30 minutes without softening. Black or transparent enamels are recommended for extreme temperatures as the colored enamels are more likely to break down under higher conditions of heat and humidity. Colored enamels should be used only for tipping the bobbin for identification. Good enameled bobbins represent quite an investment and precautions should be taken to prevent abuse in the mill. Rough handling or cleaning in an improperly adjusted bobbin cleaning machine will crack and roughen the surface, thus destroying an expensive finish.

By far the most widely used finishes for wood bobbins, today, are those incorporating a plastic substance. The bobbins are first treated with a sealer to fill the wood pores, then oiled, and are finally dipped into a hard plastic lacquer. The finished bobbin has a very smooth surface that is highly resistant to chipping or cracking. Finishes of this type are recommended for all installations except steaming of the yarn. Plastic finishes are thought to be superior to enamel because the application of enamel requires subjecting the wood to high heat from three to five times. It is felt that this repeated heat treatment reduces the life and resiliency of the wood, and has a tendency to warp the bobbin even when new. Some special types of plastic finishes are now used for steam conditioning and will stand a higher heat for a longer period of time than enamel. With these finishes there is no longer the danger of yarn, even the finest of counts, sticking on the bobbin.

Plastic finishes have completely altered the field of bobbin finishes. The recommendations and standard practices of only a few years ago have had to be revised in the light of the advantages to be derived from a plastic finish. Here, as almost everywhere in the modern textile mill, important advances have been made in providing mills with equipment of a quality never before available.

Evaluating The N. C. State Carding Projects

By JOHN F. BOGDAN, Director of Processing Research

School of Textiles, North Carolina State College, Raleigh

Ways to reduce "non-preventable" carding waste was the subject of a paper delivered by Professor Bogdan at this year's Cotton Research Clinic, and reported in the February issue of this journal. A less formal discussion of waste reduction research at N. C. State, herewith published with the comments of the speaker and his audience, was presented by Professor Bogdan April 16 at a meeting of the Northern North Carolina-Virginia Division of the Southern Textile Association, held in Spray, N. C.

Wein the North Carolina State College School of Textiles for a number of years have concentrated on the carding process because it seems to us that the card is one machine on which, by intent or perhaps just luck, you can come out very well indeed by making changes or adjustments. It is a machine that you set to one thousandth of an

inch, something you can't do with any other machine in the mill. A change of one-thousandth of an inch will make a great difference. It's just like tuning a piano. The more accurately a piano is tuned, the sweeter music it will make; and the better you can set your card the better you can control it. It is remarkable what you can do with a carding machine if you play around with it.

Our first work was on nep control and was begun in 1951. The work was sponsored by six mills, which retained the results exclusively for one year and then allowed them to be released a year after the end of the contract. So the report is now public property. We have received word from some of the participating mills that the things of which I am going to speak do work. One mill reported savings of from \$250 to \$400 a card, which would amount to a large saving per year. These things work in our laboratory and with some slight modifications they will work in the mill. It is our ambition to do our work on such a plane that it can be translated almost immediately, with only minor modifications, into the mills. If it doesn't work in your plant then

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our work is certainly not successful. We are not merely scientists in the State College Textile School, we are "lint-heads" who have the time and the facilities to do these things.

In the cleaning department of the mill we take out a good deal of what we call waste. Actually, not all of the material we take out is undesirable. Say with one-inch Low Middling, only 2.4 per cent of what we take out is trash, yet we take out around six per cent of the weight of the picker lap in the carding process. So some of that is cotton. The question is, how can we separate it and get out only this 2.4 per cent that is really trash? If you can do that, you will save the cotton that goes into the waste hopper. When we get down to finer cotton, the real waste there is even less; still you take out close to six per cent.

If you had nothing more specific to accomplish than to reduce carding waste, you could bring it down to zero. You could use a roller-top card or a revolving-flat card equipped with a fancy roll and solid cylinder screens and licker-in screens; you could remove the mote knives; you could use metallic clothing. There are a number of ways to reduce waste. But the problem is a little more difficult than that.

There are certain side benefits which accrue when you do save waste. One of them is an increase in production. If you can save, say, two per cent of the lap weight and turn it into sliver instead of strips you get two bales of every hundred that go into sliver instead of into the waste house. That is a minor saving, it might seem; but on a thousand cards, in our larger mills, the saving is considerable. If you save one per cent of the picker-lap weight you are saving \$1 a bale. So if you could save one per cent, say, instead of the two or three per cent we might save experimentally, that is \$1 a bale, which, according to the number of bales you run, works up to a sizable figure. You see, there is a substantial amount of money involved.

The thing that we might want to stress here (and perhaps I have been derelict in not stressing it before in some of my talks) is machinery conditions. A card, as of course you understand, ought to be level and the clothing in good condition before we undertake to evaluate the settings. You can't make sweet music with a piano that's out of tune, and you can't do good carding with a machine that's just not up to snuff. While perhaps you can't keep all of your machinery up to top level, you should work toward that standard. You want to be sure that all of your bearings are tight and that there is nothing in the machine itself that is going to mask the effect of any changes you may make.

In our work at the school, we did all of our carding experiments running picker laps shipped to us from the mills. The running time was two hours, but only the sliver from the last half-hour of the run was spun into yarn. This was done deliberately, because when you first begin a run, a difference may not be noticeable. But when you run an hour-and-a-half, you can pick up the difference. So all our yarns were yarns made about halfway through a mill stripping cycle, after about an hour-and-a-half or two hours of running the card.

In considering the type of card waste, there are two categories—preventable and the so-called non-preventable waste. The former is the stuff that drops on the floor, etc., which you control by beating people on the head. The other category is the waste which you deliberately take out at the card: motes, fly, cylinder strips, doffer strips, flat strips and clearer-roll waste.

According to the waste figures submitted to us by one of the participating mills, where we set up some test cards in 1953, a gradual drop began almost immediately after we started the test. And the drop continued. There was a saving of about one per cent in the flat waste and about 1.5 per cent in the fly. So they were saving 2.5 per cent on those cards which they changed, which is \$2.50 a bale for this particular mill.

The waste on the card is made up of doffer strips, cylinder strips (which are removed periodically), flat strips, motes and fly. We were able in our work to reduce the carding waste from about 5.75 per cent of lap weight, which the mills reported, to about three per cent of lap weight, a saving of about 2.75 per cent.

Shirley analyzer tests, which are a means of separating the lint and the trash, show that the type of waste which we are producing with the settings we are recommending is a dirty waste. Naturally, that's what we want. We don't want the dirt to go on through, we want to separate it from the lint. The proportion of trash to lint shows that we were able to accomplish a considerable saving there.

I'd like to point out that the yarn produced with North Carolina State College settings looks no worse than the yarn produced with the mill settings. The question has been asked if this is true with combed yarn made from higher grades of cotton. The answer is that it is. The yarn we processed was higher in strength than that made with the regular mill settings.

One of the larger forms of waste occurs at the licker-in assembly. If we can prevent even part of this waste we make a substantial saving. The location of the mote knives is controlled by the man that sets the card. If there is a wide clearance between the licker-in feed plate and the top mote knife, you lose a large part of your lint. By moving the mote knife back toward the feed plate we were able to save as high as 20 per cent of that waste. The change does not seem to affect the dirt and trash, the heavier part, which are still carried through by the air; but it does close up that space so the fly does not go through. So that is one of the settings which we are recommending—to locate those knives closer to the feed plate and control that distance there.

If you use a very short licker-in screen, you lose lint between the feed plate and the first knife. You also lose lint between the bottom mote knife and the nose of the screen. The only thing you can do is to replace those screens with a longer screen. It is very difficult to save that lint by relocating the mote knives. The long screens give you lower amounts of waste; the short screens give you larger amounts of waste. That has been found very important. These changes do not seem to affect the break factor. With the settings we used, as against the mill's settings, there was no significant drop in strength shown.

Here is another example which illustrates that if you close up these openings you will reduce waste. We attached the horizontal mote knife against the feed plate. That merely plugs up the opening, prevents the swish of air through there and reduces waste. The licker-in is more or less a high-speed fan, that is all it is. So if you control these air currents you'll get better results.

Of course, there is a difference between the two sides of flat strips. The inner surface is usually clean. What happens is that when your clean flat comes around it loads immediately with good cotton, partially. It has to do that because the cylinder has become loaded to some extent. A flat is just like a milk bottle into which you are stuffing cotton. You

can put the cotton in very easily when the bottle is empty, as the flat is when it first comes around; but after the bottle is full or the flat is loaded it becomes more and more difficult to force anything into it. What does happen is that the dirt and trash tend to cling to the flat strip in passing through the machine. Dirty cotton itself will not be helped by the card wire when the space between the card points is much larger than the dirt. When your wife dusts around the house she doesn't use card clothing, but a cloth which takes up the trash. What we are trying to do is to take out the dirt and trash and save the white cotton, if we can. We do that by controlling the flat speed.

If you run your flat at six inches per minute you take out nearly six per cent; by dropping the speed to three inches per minute you take out less than two per cent. It stands to reason that if you slow down the flats you take out less material, and if you speed them up you take out more. Now, the man who designed flats made that speed a standard speed, regardless of the production rate. It doesn't matter whether you are running Egyptian cotton or running $\frac{3}{4}$ -inch Good Ordinary, you run a flat speed of five inches a minute. That doesn't make any sense at all. Flat speed ought to be based on the grade and the production rate.

As to the effect of flat speed on card-sliver delivery, it is safe to say that with slow speeds you put more cotton into your sliver. That does happen. At six inches per minute, 93 per cent of the weight you have is sliver and seven per cent total waste. It may sound ridiculous and dangerous to run a card for two hours with a production rate of 25 pounds per hour, but it can be done. Once your flat fills up partially nothing much more is going to happen to it.

People want to know the effect of flat speed on flat-strip weight and how it affects the weight of the strip per flat. Well, naturally, if you fill them up, the rate at which they fill up is slight.

Concerning flat strip waste versus flat position, with flats stationary, you get that relationship in this way. Run the card for two hours, take the flats off, take the strips off each flat, and weigh those strips. Say the first flat has about 40 grains of material and the next one about 20 grains, with a gradual drop after that. That first sharp drop means that the first two flats are doing most of the work. They have to. Your setting may be as close as .010 inch. After you get to the fifth flat it doesn't do any more good.

The motes and fly do not show any effect from the flat speed. You wouldn't expect them to because motes and fly are controlled by the air current. The flat strips do drop with the speed. There is no reason to run 3.5 inches per minute when you know that by cutting down you can save in waste. The easiest way to reduce flat speed is to take the drive off the cylinder shaft. That will reduce the speed by about one-half, and your waste will drop in proportion to that change in speed. If you want to get down to an even lower rate, you will have to get a pulley. If you have not already made this change then that would be the first step to take.

One of the most important settings is that between the top of the front knife-plate and the flats. That setting is very critical in controlling the air currents. You can close that up by moving the front plate up to as close as you can get it; .010 is what we have been able to get without any trouble. Then you find that the wind is not going to tangle the fibers. We think that is a setting that ought to be checked and ought to be standardized. Another thing, changing that setting will reduce the fly on the front of that plate.

The same thing is true for the back knife-plate. After we



Jenkins, Pittendreigh, Crawford

NEW OFFICERS FOR S.T.A. SOUTH CAROLINA DIVISION—Elected chairman of the South Carolina Division of the Southern Textile Association at the division's Spring meeting April 21 was Joe N. Jenkins, superintendent of the Upper Plant, Kendall Cotton Mills, Pelzer, S. C. He succeeds W. M. Pittendreigh, superintendent of grieg mills, Riegel Textile Corp., Ware Shoals, S. C., who served two years. Elected vice-chairman was Alex Crawford, assistant superintendent, Joanna (S. C.) Cotton Mills Co. The meeting, held at Ware Shoals, will be reported fully in next month's issue of this journal.

noticed this effect at the front we played around with the back knife-plate and got better quality yarn by closing up this space. Through controlling the air currents, we were able to get a better quality of yarn.

There are a great many other changes. If you reduce the opening on the back knife-plate you are able to get the air out of the licker-in assembly onto the cylinder, and if you can do that you are able to reduce the pressure which forces the lint through the mote knives onto the screen.

At State College the normal setting of the back plate to the flats was 0.068. When this was closed to 0.010 inch, by moving up the back plate, there was a reduction in waste and an improvement in yarn quality. So we recommend a setting of .010 there. On the flats-to-cylinder setting, a setting of 7, 7, 9, 10 and 12 from back to front seem to give the best results.

The setting of the licker-in screen to the licker-in is obviously a critical one in controlling fly waste. The closer you can get that setting the less waste you will have. If you can get a setting as close as .010 inch you still allow the heavier trash to drop out; but the lint, which is controlled by the air, does not drop out.

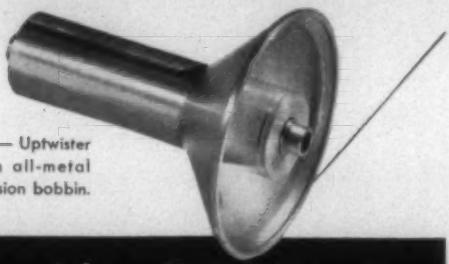
Higher cylinder and licker-in speeds would allow you to clean up the dirty, heavy wastes which you have and let you produce a yarn you could sell very easily. But an important question there is whether our machines are able to take a much higher speed.

(Discussion Leader: *M. J. Mallard*, assistant superintendent, Highland Cotton Mills Inc., High Point, N. C.)

Mr. A: Are any of the mills represented here using the card settings recommended by State College?

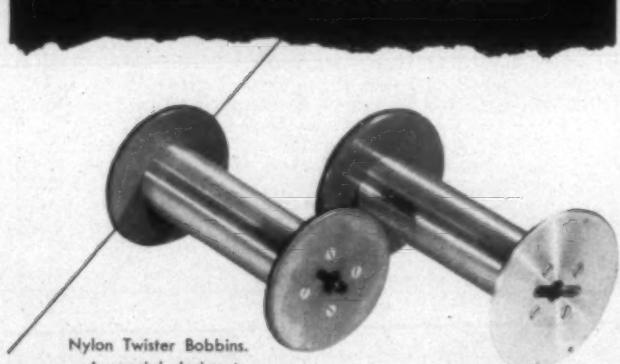
Mr. B: We have tried them on one card which we have just put into production. So far as the tests we have made on it go, it has shown good results. We are getting about half again as much flat strips as we were getting, but we haven't had it running long enough to test it thoroughly. We started only recently, and we plan to make a thorough test of it. We have some vibration now, which I am sure is coming from our licker-in not being balanced.

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as well as it needs to be. We are running the licker-in 790 r.p.m. and there is a little more vibration on one side of the card than on the other. The card is sitting on a concrete floor, on the ground so it is not coming from the floor. Mr. Bogdan, I wonder if after the card runs a while that vibration is going to get worse and whether we shall have to take the licker-in out and have it balance properly?

Mr. Bogdan: I do not believe that your trouble will get better. If you are having vibration, with the card on a concrete floor, it means that you are perhaps having trouble with the bearings. One mill man tried running the licker-in at high speed and had trouble with vibration, and a representative from the factory who was called in had to put rubber pads under his cards at six points. Those are very heavy rubber pads, about six inches thick. So, if you have trouble with the licker-in being out of balance at high speed, it can be overcome.

Mr. C.: Would you advise setting your flats close at the back if you have a wooden floor? I mean, if you have a concrete floor your cards would be level and your bearings would wear the same amount. But if you have a wooden floor and the whole section around there is wood, it looks to me as if the fiber of the wood might vary and might not wear equally on all sides. It looks to me as though it might be difficult to get those settings.

Mr. Bogdan: The question of whether you can achieve these close settings in your mill depends upon a number of things. The condition of the cards and the flooring obviously determines how close you can set some of these elements. The most critical setting, as far as achieving it and maintaining it is concerned, is the flats-to-the-cylinder, because there you have surface contact. It is not a line contact, such as you have between the doffer and the cylinder. There is just one point there, one line across the surface where you have contact; but with the flats there is contact across the whole surface, which has to be maintained. But the mills have been able to get that. They say they can get these settings and have done it. Not every one that is working with us has always taken all our settings and used them.

Mr. C.: In the mills that tried this out, were the card rooms one-story?

Mr. Bogdan: One mill has cards in seven or eight or more units. The buildings are just typical mill-construction buildings; there is no magic about it. The floors are in good condition, of course.

Mr. C.: Have you made any extensive tests on the ratio in which you produce your nep count, say, by cutting down the flats from ten to seven? Say your average production was two pounds, what is the average nep count?

Mr. Bogdan: You ought to get better results at seven.

Mr. C.: Is the ratio in proportion?

Mr. Bogdan: I can't tell you just offhand, but you do get better work with closer settings. The closer the setting, the more you can break up those lumps.

Mr. D.: I'd like to ask Mr. Bogdan about metallic card clothing. Is it more advantageous on low-grade cotton or on better cotton?

Mr. Bogdan: At the school we have just one metallic card, which was reclothed in the last four or five months. We have run a series of tests on it, working up as high as 1½-inch Egyptian. The trend of opinion seems to be that the machine will do better with the better grades than with the poorer. I think the reason for that is that you do not take out any cylinder strips or doffer strips. If you could start out with a cleaner lap, the highest grade of lap, you might do pretty well with the metallic. Personally I have not been able to do as well with the metallic as I have with the fillet.

Question: How about on synthetics?

Mr. Bogdan: The biggest market is on the synthetics and the woolen trade. You don't want to do any cleaning on synthetic; you just want to open it up. You can do better with the fillet on cotton than you can with metallic card clothing. If you don't care what your yarn looks like, you can save waste with the metallic.

Chairman: Do you grind metallic at all?

Mr. Bogdan: You don't grind the flats but you do grind the cylinder—just touch it up.

Question: Can we slow our flats down by taking off that pulley and do satisfactory work? Do you have to have a lot of preliminary work in opening and picking and in other card settings, or can you just change those flat speeds? Can we make a big reduction in waste without jeopardizing our work?

Mr. Bogdan: I showed the results with no change except the flat speeds. The change in appearance is very slight, especially with 1/16-inch Strict Middling, on better grades. The change on 1/16-inch Low Middling did not show much improvement. When we went from two inches per minute to six inches per minute it got worse, and we had to stop. If you change from 1½ inches to 1¼ inches, you might not see much difference. When you do what we like for you to do some of these other things, I think it might help you to slow it down on lower grades.

Mr. E: On this question of flat speeds, in our mill, on low-grade cotton, when we slowed down the flats and took the pulley off and just ran it from the shaft, we had a definite increase in fly at the spinning room.

Mr. Bogdan: Did you use the high licker-in speed?

Mr. E: No, we did not.

Mr. Bogdan: You just made the flat change?

Mr. E: Yes.

Mr. Bogdan: Obviously, the high licker-in speed does a better job. I think you will agree that with the higher speed you must be breaking up the lumps. That is one thing we achieve. The next is better cleaning, because the centrifugal force tends to throw out the larger pieces of trash. It also tends to get out the deeper trash and blows off the shorter fibers. We have not seen any indication that there is any increased fiber breakage. This is not a new thing; there are thousands and thousands of cards operating today with speeds of 700 and 800—725, 750. So this is not a new thing. I think it might possibly help that condition of short fiber and fly if you try a combination of higher licker-in speed and lower flats.

Mr. F: What is the limit on the licker-in speed? Anything above 800?

Mr. Bogdan: It depends on several things. If the cylinder is going about 165, you can go over 800 on the licker-in and be safe. If you get up to around 850 or near 1,000 the licker-in then tends to strip the cylinder. I don't know any mill that is running over 825. The only thing you can do there is push up the cylinder.

Mr. E: Can you put finer wire on that licker-in and get the same results?

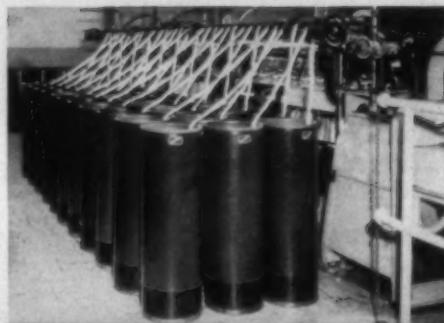
Mr. Bogdan: Note quite. We played around with that, too. We put on four points to the inch, eight wraps. That is 32 points. Then we had five points, eight wraps; that is 40 per inch. We also had five points, 15 wraps, which is 75. Then we had one at 60. It does not work quite that simply; I don't know exactly why. On staples up to 1 1/32-inch we have been able to do as well with 32 points per square inch as we have with finer.

Spinners' Inventories Show Slight Increase

Stocks of carded cotton sales yarn in spinners' hands registered a slight increase during April, the Textile Information Service reports. Spinners' inventories on April 30, including yarn made for future delivery against unfilled orders, amounted to 1.88 weeks' production. This compares with stocks on April 2 equal to 1.59 weeks' output and with inventories at the end of April 1954 equivalent to 2.49 weeks' production.

Unfilled orders on spinners' books as of April 30 amounted to 8.14 weeks' production and were 4.33 times the stocks on hand. Backlogs on April 2 were equal to 8.80 weeks' output and 5.53 times stocks and at the end of April last year they amounted to 7.70 weeks' production and were 3.09 times stocks on hand.

American Viscose Corp., leading rayon producer in the United States, has entered the multi-million pound sterilized absorbent field, according to Harry L. Dalton, vice-president. In co-operation with Johnson and Johnson, leading manufacturer of surgical dressings, Avisco is producing rayon staple for J. & J.'s new Red Cross sterile absorbent. According to the surgical dressing company, it is the greatest improvement in surgical absorbent since the introduction of sterile cotton. The new product is said to be softer, whiter and cleaner than any previous type.



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Simplified Determination Of Yarn Diameter

By B. L. WHITTIER, Head of Fabric Development Department, and S. A. MAVLANKAR

School of Textiles, North Carolina State College, Raleigh

This is the first of two articles on a suggested method of calculating the diameter of yarns, and explaining the relationship of yarn diameters to the compactness of a fabric, which, while requiring some study, can be used by any fabric engineer. While the calculations were drawn up for use with spun yarns, they can be adapted with certain allowances for determination of filament yarn diameters.

FOR a fabric designer to produce an ideal woven cloth structure best suited for a specified purpose, attention must be paid to such basic factors as weave, size of yarns and concentration of warp and filling in the cloth. A fabric engineer is expected to select a weave and yarns that are suitable and to use them in the proper combination in the cloth to produce a structure having the desired properties.

When the weave has been chosen, a basic knowledge of yarn diameters is necessary to determine the size of the warp and filling yarns and the concentration of these yarns that will produce the desired texture. It should be obvious to anyone familiar with textiles that a stiff or boardy fabric is obtained by weaving in a given space as many yarns as possible. Conversely, a limp or sleazy fabric will be produced if the yarns are spaced apart from each other.

The purpose of this discussion is to present a simplified method of calculating the diameter of yarns and to explain the relationship of yarn diameters to the compactness of a fabric. The calculations are suggested for use with spun yarns, but with certain allowances, could be adapted for determination of the diameter of filament yarns.

For many obvious reasons, the accurate determination of yarn diameter has not been an easy task. First, an assumption has to be made that the yarn is cylindrical in shape. Secondly, the amount of twist will have an effect on the diameter of yarn. The various processes, including weaving, will obviously alter the initial diameter of yarn. The size and shape of the individual fibers will affect the density of the yarn and consequently the yarn diameter. The presence of high moisture might cause swelling of fibers and increase the diameter of a yarn.

Even with all these variables, a fabric designer should have some knowledge of the approximate diameter of the yarn from which he has to make the fabric. Such knowledge serves as a foundation on which to build the fabric.

If the diameter of a yarn is known, it is easy to compute

the number of yarns that can be placed side by side in a lateral plane. Usually this is expressed in terms of the number of yarns per inch of fabric, because of the customary practice of stating fabric count or construction in terms of the number of yarns (ends or picks) per inch.

Consequently, this article will use the common term "Compact Cover" to express the maximum number of yarns of a specific size that can be placed side by side in one inch of space without any compression of the yarn. The term "Compact Cover Factor" will refer to the maximum number of 1s cotton yarns that can be placed in one inch of space, without compression.

Ashenhurst's rule for determining these has been known for many years. Though there have been some variations of this rule, shown in different publications, it can be expressed substantially as follows:

$$\text{Compact Cover} = \sqrt{840} \times \text{cotton yarn number} [\text{minus allowance for different yarns (usually 7% for cotton yarns)}]$$

$$\text{Compact Cover Factor for Cotton Yarn} = 27$$

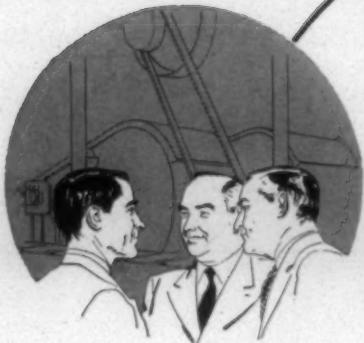
Later, Frederick Peirce advised the use of a conventional cotton yarn diameter of 0.0358 inch for 1s cotton yarn. This gives us a Compact Cover Factor of 27.9.

More recently, J. B. Dickson, recognizing the need for more information about the diameter of yarns spun from fibers other than cotton, published a series of articles in which he established various factors for use in conversion from one fiber or unit of yarn size to another. He suggested the use of an "all-fiber system," based on a hypothetical fiber with a yarn density of 1.00 grams per cubic centimeter. The tables and examples of how to solve conversion problems have been a worthy contribution towards an understanding of the subject of yarn diameters.

Simplified Method of Determining Compact Cover

A study of the publications of Peirce and Dickson suggests the possibility of a grouping of fibers into three classes, and the use of one Compact Cover Factor for each class. The factor would not apply at all to monofilament yarns that have the same density as the fiber from which they are made, nor should it be used for yarns made from very coarse fibers, such as ten to 25-denier. Within the common range of fiber size, however, the Compact Cover Factors suggested should be reasonably safe for practical use.

It is interesting that the majority of fibers presently used in making fabrics for apparel, household use, and indus-



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trial use in the United States have densities that fall within three general ranges. A list of these follows:

Class I 1.50-1.55 gr./c.c.	Class II 1.31-1.38	Class III 1.12-1.17
Cotton	Wool	Nylon
Viscose Rayon	Acetate	Orlon
Cupra	Dynel	Acrilan
Fortisan	Dacron	

Accepted density figures for different fibers have been established, but there seems to be some doubt in many instances as to the correct figure. For instance, the density of cotton is variously shown from 1.50 to 1.54, rayon from 1.50 to 1.54, Orlon from 1.14 to 1.17. Furthermore, it has been proven that the density will vary to some extent within one lot of fiber. This variation might well exceed the limits of the ranges outlined above.

Therefore, if the suggested Compact Cover Factors are used only as a basis for building, developing or comparing a fabric; and, if the results obtained by their use are not confused with a scientifically accurate determination found by optical measurement, then it should be safe to use three figures for fiber density, as follows:

- Class I — 1.50 gr./c.c.
Class II — 1.35 gr./c.c.
Class III — 1.15 gr./c.c.

Dickson assumes that yarns spun of other fibers will have about the same degree of fiber packing as cotton yarns and records Compact Cover Factors for yarns made from fibers of different densities. On this assumption, we can develop

Compact Cover Factors of 28, 26.5 and 24.5 for the three classes shown.

As we know this factor represents the number of compact yarns per inch for a yarn of 1s cotton count (or yarn number), it is a simple matter to determine the Compact Cover for any other yarn size.

The diameter of a yarn varies inversely as the square root of the yarn number (when using an indirect system) and by using the reciprocal of the diameter, we can establish simple formulae, as follows:

$$\begin{aligned} \text{Compact Cover (max. yarns per inch)} & \text{ Class I} = 28 \sqrt{N} \\ & \text{ " " " " " Class II} = 26.5 \sqrt{N} \\ & \text{ " " " " " Class III} = 24.5 \sqrt{N} \end{aligned}$$

Where N is the yarn number, using the cotton system.

A comparison of the determination by this method with Dickson's tables should convince anyone that it has practical application, if the variations in fiber density and the variations caused by twist, compression and other distortions are considered. It should always be remembered that these figures represent an approximation and should be used as mentioned above.

Yarn (Cot. Count)	Suggested Method	Dickson's Table	% ±
20/1	$28 \sqrt{N} = 125.2$	125	—
24/1 Wool	$26.5 \sqrt{N} = 129.7$	128.5	.92%—
24/1 Dacron	$26.5 \sqrt{N} = 129.7$	131.4	1.27%+
30/1 Orlon	$24.5 \sqrt{N} = 134.0$	135.1	.82%+

Similar Compact Cover Factors have been determined for fibers that have densities somewhat different from the 11 mentioned previously. The comparable factor for Vicara, for instance, is 25.5; for Saran, 29.5; and for glass fibers, 36.5. (*To be concluded*)

Bleaching, Dyeing & Finishing

If Properly Used, Textile Process Drying By Radiant Heat Is Not Too Expensive

By RUSSELL RANSON, Ranson, Wallace & Co. and Edwin L. Wiegand Co., Charlotte, N. C.

This report on the application of electric heat to textile process drying, based on radiant heater tests conducted by the Department of Electrical Engineering at Duke University, was presented at last Fall's Southern Textile Conference of the American Institute of Electrical Engineers.

IT is not practical to develop mathematical formulae by classical methods that will show the drying that will be obtained from the use of radiant heaters when applied to various processes such as textile drying processes. Attempts have been made to set down these relationships in a manner

that would be usable to an operating engineer; but these attempts have included the use of various assumptions which, in themselves, made the end results of questionable practical value. In other words, if the accuracy of the end results were predicated upon one or more assumptions, then the accuracy of the end results would be no better than the over-all accuracy of the several assumptions.

Feeling that there is a very definite field of application of infrared radiant heating—particularly far-infrared radiant heating—in the textile industry, a series of comprehensive tests were set up in the electrical engineering laboratories at Duke University for the purpose of collecting empirical data showing the relationships involved in the use of far-infrared radiant heat for typical textile drying

processes. These tests were set up with the hope that the data collected would result in the establishing of reliable mathematical relationships which could be used conveniently and with a high degree of accuracy to determine how much capacity of far-infrared radiant heaters and how much time would be required to do any particular textile drying job.

It was recognized that in order to cover a wide range of textile processes, it would be necessary for the tests to be run on a wide variety of materials ranging from very heavy natural fibers that would absorb a relatively large amount of moisture to very light synthetic materials that would absorb a relatively small amount of moisture, and that the various materials should represent a wide range of colors. Also it would be necessary for the test to cover a wide range of moisture contents, such as would be representative of the extremes in operating conditions. Accordingly, the investigations were correspondingly comprehensive.

The tests on which this report is based were conducted over more than 20 months' time. While a considerable amount of time was spent in developing a satisfactory and reliable testing technique, only the testing procedure that was eventually evolved will be described. Testing equipment was used to continuously weigh the test sample that was being exposed to the far-infrared radiant heat to determine the drying results or characteristics. The test sample was wet to the desired percentage moisture content and suspended in a holding frame. Chromalox far-infrared radiant heaters were arranged in two banks, facing each other, and supported in a counter-balanced frame arranged so that the heaters could be lowered at the beginning of a test to expose the fabric sample to the far-infrared radiant heat and at any desired time the heaters could be raised so that the fabric sample was effectively withdrawn from the heated zone. The fabric sample in its frame was supported by a small wire from a very accurate set of scales which were mounted overhead. Directly above the scales was an electrically-driven clock with a sweep second hand making one revolution per second. A moving picture camera was supported from the ceiling and focused to make a permanent record of the timer and the scales so that an accurate and permanent record was obtained of the relationship between time and the loss of weight of the test sample through evaporation due to exposure to the far-infrared radiant heat. Since full deflection of the scales is only one pound, very accurate weight records were obtained.

Results obtained from these tests emphasize that widely different over-all drying effectiveness will be obtained, depending upon the particular arrangement that is used for the source of far-infrared radiant heat. There are many factors that influence the over-all drying effectiveness, some of these including the location of the heaters relative to the fabric sample, the material and shape of the reflector used, the watt density used on the heating element, the location of the heating element relative to the reflector, the general configuration of the bank of far-infrared radiant heaters, etc.

After several thousand tests had been made, the data collected was studied very carefully to determine how it could be plotted on suitable curves or otherwise utilized to the best advantage. Originally it was anticipated that families of curves should be plotted showing the relationship between moisture evaporated and time and that there should

be one curve for each percentage moisture content investigated. However, it was soon learned that with such resulting families of curves (one for each percentage moisture content) it was very difficult to conveniently use the information. Further study revealed that if the data were plotted in terms of weight of water evaporated per square yard of material, and if this measure of drying were plotted against time, very convenient-to-use information resulted.

Literally thousands upon thousands of test measurements have been made under various typical operating conditions and all of these have been analyzed and reduced to mathematical relationships as referred to later. To illustrate some of the typical operating conditions that have been investigated, tests have been made with radiant heaters located on only one side of the fabric, tests have been made with the radiant heaters located on both sides of the fabric, tests have been made with the fabric making a single pass in front of the radiant heaters, tests have been made with the fabric making a double pass in front of the radiant heaters, tests have been made with radiant heaters spaced at different distances from the fabric, tests have been made with the radiant heaters spread apart along the length of the fabric, and tests have been made for many other conditions. Also, for each condition, all tests were repeated several



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times in order to be sure of the accuracy of the results obtained.

As a result of a thorough analysis of the data obtained from the many test conditions, it has been possible to establish empirical mathematical relationships which are quite accurate, reliable and usable. Several of these empirically-developed relationships for the most frequently used application conditions will be given. Attention is called to the fact that in order to illustrate that it is very practical to use electrically-generated far-infrared radiant heat to textile applications, from the standpoint of initial investment and also from the standpoint of operating costs, the relationships given apply when full advantage is taken of information obtained from these tests, and the proper combinations of designs and application are utilized.

If the textile drying application is such that the fabric can be exposed to free air for approximately six seconds for additional evaporation after the fabric leaves the heated zone, the following empirically-derived relationships apply:

$$T = 73.2 W \times 1$$

C

$$N = 11.9 SW \times 0.163 S$$

Where:

T = Time of exposure to far-infrared radiant heat in seconds.

W = Pounds of water removed per square yard of fabric.

N = Number of Chromalox RAD far-infrared radiant heaters required.

S = Speed of fabric in yards per minute.

C = One for heaters on one side of fabric.

Two for heaters on both sides of fabric.

If the textile drying application is such that the fabric cannot be exposed to free air for additional evaporation after the fabric leaves the heated zone, the following empirically-derived relationships apply:

$$t = 72 W \times 6$$

C

$$n = 11.7 SW \times 0.98 S$$

Where:

t = Time of exposure to far-infrared radiant heat in seconds.

n = Number of Chromalox RAD far-infrared heaters required.

Other symbols same as stated previously.

In addition to the results obtained from laboratory tests, very satisfactory results have been obtained with Chromalox far-infrared radiant heaters installed on production machines and the results obtained from such production installations tend to confirm the findings of the laboratory test.

While the subject matter of this paper has had to do primarily with electric far-infrared radiant heaters for drying applications, nevertheless, they can be used to excellent advantage in many other textile applications such as curing resins, drying impregnating materials, and heat-setting and heat-stretching of synthetics such as nylon. On tenter frames, for instance, provision is made for rotating the heaters away from the fabric when the tenter is stopped,

thereby preventing an overheating or burning of the fabric. From experience gained through many installations for curing resins and other applications as referred to, empirical data on far-infrared radiant heater capacity required to successfully handle such applications is available.

For many years it has been the widely held opinion that electric heat is expensive heat and therefore the operating cost would prohibit the use of electric heat for widespread drying applications in the textile industry. The results of the tests reported in this publication show that electric far-infrared radiant heat is a most useful tool for the textile industry and that if full advantage is taken of design information and application information that is available as a result of these tests, operating costs that are competitive with the cost of other sources of heat can be obtained. In addition the initial investment and space requirements when electric far-infrared radiant heat is used are far less than would be the case with other sources of heat. Furthermore, a much higher degree of control and much more consistent and dependable results can be obtained from the use of electric far-infrared radiant heat. Electric power companies are anxious to co-operate with textile plants who are considering the installation of electric far-infrared radiant heat. Putting all of these considerations together, we predict that there is to be a tremendous swing toward the use of electric far-infrared radiant heat for a wide variety of applications in the textile industry.

A.A.T.C.C. Seeks To Extend Research Work

A 50 per cent increase in dues income for the research fund of the American Association of Textile Chemists and Colorists is the goal for the coming year of a corporate membership drive announced by A.A.T.C.C. this month. Additional support by some 200 business firms will be sought for this dues revenue increase-needed to raise the association's research budget to \$75,000 a year, it was announced. Present corporate membership is 280 firms.

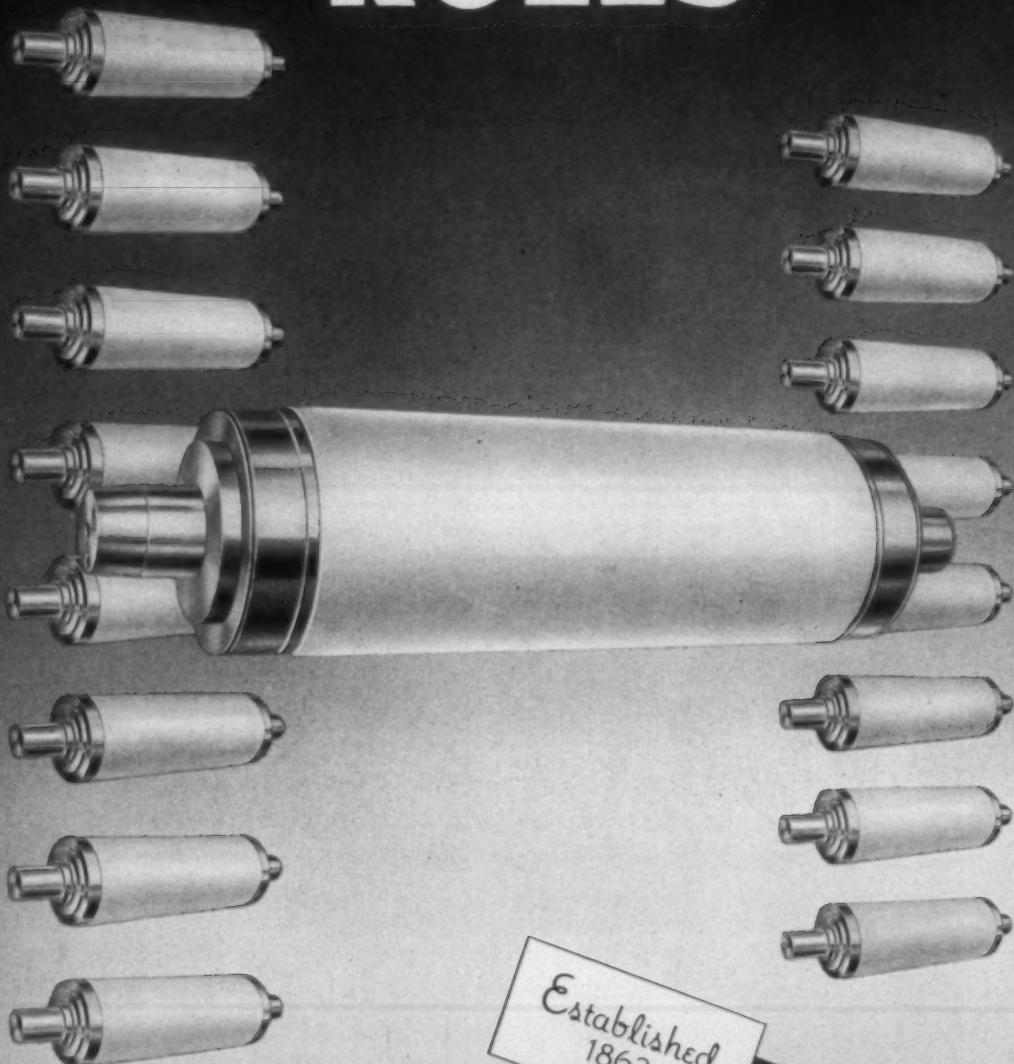
Dr. Harold W. Stiegler, A.A.T.C.C. director of research, said the new funds will meet only the immediate need for the expansion and improvement of the association's research facilities. The campaign will continue for several years, in order for it to acquire the kind of industry support needed to put the program on the soundest footing, Dr. Stiegler said.

Albert E. Johnson, national corporate membership committee chairman, reported that more than 200 persons in the association are co-operating in the campaign and that early indications of interest in this project offer high hopes for its success.

At the press conference in New York City, Dr. Stiegler demonstrated one of the A.A.T.C.C.-developed devices—the Accelerotor. This instrument, he said, is capable of evaluating textiles in a few minutes, for wear service, launderability and other factors that would otherwise take a great many hours to determine. This and other quick-test procedures developed by A.A.T.C.C. are becoming more and more essential for continuous quality checks in textile production.

A.A.T.C.C. research headquarters are located in Lowell, Mass. There the association carries out its investigations in co-operation with its many voluntary committees of industry technicians for the development of standard test methods and procedures. With the increasing emphasis

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being put upon performance testing and quality control, Dr. Stiegler said the need for test methods, particularly with reference to end-use performance evaluation of textiles, has increased enormously.

* * *

A special new committee of the executive council on research of the A.A.T.C.C. will shortly be appointed to collect, co-ordinate and distribute available information on studies of textiles in their end-uses, so that present and future A.A.T.C.C. tests can be relied on to reflect end-use performance.

Recent meetings of the committee resulted in further progress in detailing ways and means these end-use performance data may be accumulated, Leonard Little, chairman, said. The committee agreed to proceed with laundry tests on work clothes, and arrangements will shortly be made for mild, medium and harsh washing of both work clothes and fabrics. Tests will refer to both color and fabric, to assure proper correlation with actual laundering performance, it was stated.

Soil-Resistant Treatments Needed For Cotton

Successful soil-resistant treatments could significantly enhance cotton's competitive position in household and industrial markets which consume large quantities of competing products. This fact is developed in a technical study of resistance to soiling by cotton, written by a member of the technical staff of the National Cotton Council. Prepared by Nelson F. Getchell, the study points out that improved soil resistance would be of greatest importance in household and industrial markets which in 1953 used 382,691 bales of cotton, as compared with the equivalent of 510,100 bales of other materials.

These markets include items "where discoloration from dirt is common, where appearance or 'eye appeal' rather than sanitation is of greatest concern and where cleaning is difficult and laundering often impossible." Rugs and carpets, upholstery, draperies and automobile fabrics are typical of these uses. "The greatest common denominator making this group an outstanding problem is the difficulty or impossibility of applying ordinary wet-cleaning methods," the study reports. "Elimination of the need for cleaning by these means is of primary interest to the consumer. Reduction in fabric soil retention and increase in the ease of dirt removal by simple, in-place mechanical cleaning operations should be the goal of research."

Successful soil-resistant treatments have already been applied to rugs, either in the finishing stage or after cleaning, with a marked decrease in soiling. In addition, the treated rugs are more easily cleaned. The report points out that soil resistance treatments could also be a big factor in other large markets, particularly the apparel field. Consumers are not yet as fully aware of the advantages of resistance to soiling in these uses but a growing interest is apparent. These markets used 860,000 bales of cotton in 1953 as compared with 602,074 bales of competing materials.

Surface-Printing Process Called Simple

More than 15 million yards of textiles already have been surface-printed, achieving the soft, bright effect of costly hand-blocking, by means of new surface colors and a unique

new application of pigment printing. Now in regular production, colors for the new process were developed by the Warwick Chemical Division of Sun Chemical Corp., Long Island City, N. Y.

The new procedure is now being used with equal success on cottons, rayons and other synthetics, and on various blends of these materials. So far, draperies are the principal items being printed by the growing number of textile printers utilizing the new system, although some bedspreads and dress goods are being done as well. The process involves the use of surface or relief printing rolls, rather than intaglio or rotogravure cylinders. Once the operating techniques are mastered and color shop techniques demonstrated under the supervision of Warwick's training staff, the process is fairly simple.

Hand-blocked or screen-printed textiles are produced by a recognized time-consuming method, and results are measured practically in the tens of yards. With the new surface-printing method, made possible by Warwick's new color development, a pleasing hand-blocked or screen-printed effect can be achieved in the tens of thousands of yards and at much less cost proportionately.

Collaborating on the initial research effort with Warwick's textile department were the pigments division and the color research laboratories of Sun Chemical. In addition to supplying Warwick, the pigments division provides pigments for Sun's extensive paint and printing-ink activities. The Color Research Laboratories are concerned with the color developments of all 26 divisions of Sun.

A.A.T.C.C. Exhibit Space Half Gone

More than half the available booth space at the annual textile dyeing and finishing exhibition of the American Association of Textile Chemists and Colorists this September has already been taken by more than 40 exhibitors from a variety of parts of the textile industry. Good exhibit spaces are still available, however, it was announced by Richard R. Frey, at A.A.T.C.C. headquarters, Lowell, Mass., who is in charge of space allocations.

Firms who have already reserved their booth spaces represent a cross section of the industry, Mr. Frey said, and they include companies in machinery, dyestuffs, textile chemicals, instruments, equipment and supplies. The exhibition will be held September 22, 23 and 24 in the Chalfonte-Haddon Hall, Atlantic City, N. J., in conjunction with the annual convention of the A.A.T.C.C., the largest textile association in the United States.

The recently-perfected Metlon with Mylar metallic yarn has received the approval of the American Institute of Laundry, it is made known by Arthur Brucks, president of the Metlon Corp., manufacturers of the yarn.

Metlon with Mylar has exceptional strength and is highly resistant to heat, being able to withstand temperatures over 300° F. It is believed the endorsement of its washing qualities will make it of particular importance to both mills and manufacturers.

The yarn's heat-resistant quality makes it expedient to wash fabrics incorporating it in a washing machine, the first time this has been possible with a metallic yarn. There are no qualifying washing instructions necessary for either temperature gauges or cleansing agents. It may also be ironed at any temperature required for the fabric in which it is used.

Maintenance, Engineering & Handling

The Dollars And Sense In Metallizing

By JULIUS NILL, Southern Division General Manager, Metallizing Co. of America

ANY alert mill executive wants to know how soon he can write off the initial cost of capital equipment used in actual yarn or cloth production, and he asks the same question when it comes to buying auxiliary machinery for maintenance work. The accompanying pictures, taken from a film depicting the use of Mogul metallizers, indicate how several Southern mills have found solutions to various problems of worn textile machinery parts.

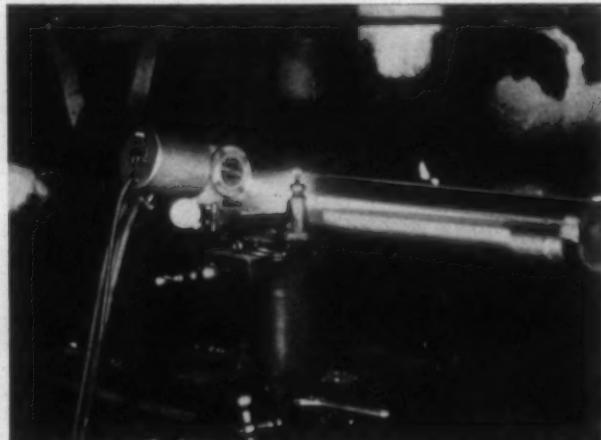
While the legends for each picture specify time spent and material used, they do not take into consideration the most important and very significant saving which results from application of the metallizing process: extending the useful service life of the parts from two to as much as four times that of the original journal surfaces, due to the porosity

which is characteristic of a properly-sprayed surface which has been impregnated with graphite. Such impregnation is the least expensive and one of the most effective forms of preventive maintenance. In some instances, where discoloration of product may be involved, a colorless high-melting-point micro-crystalline wax may be substituted for the graphite.

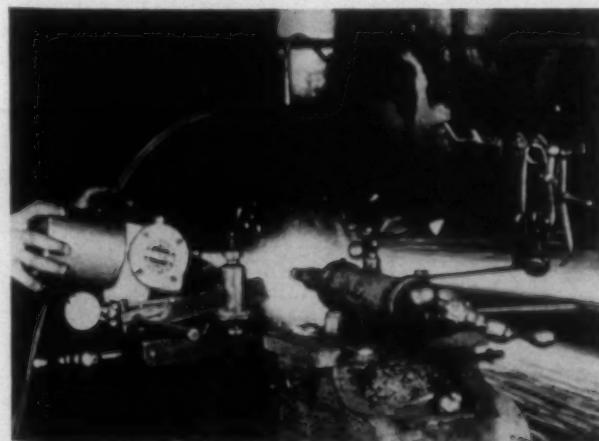
In addition to the four applications shown, two more instances can be cited. To metallize a gear and pulley kit for Type E loom crankshaft, total time for preparing, spraying and finishing is 21 minutes, total material cost is 54 cents. To metallize a cast iron roving frame builder motion shaft, total time for preparing, spraying and finishing is 15 minutes, total material cost is 40 cents.



Metallizing fluted feed roll journal for card. Total time for preparing, spraying and finish machining, 26 minutes; total material cost, 55 cents.



Applying metallized permanent covering to loom sand roll. Total time for preparing and spraying, 30 minutes; total material cost for file-hard chrome stainless steel, \$6.



Metal spraying a warp beam journal. Total time per end, 15 minutes; total material cost per end, 30 cents.



Spraying flat card sprocket shaft journals, both ends. Total application time, ten minutes; material cost, 32 cents.

Promotions, Resignations, Honors,
Transfers, Appointments, Elections,
Civic and Associational Activities

PERSONAL NEWS



H. Dorsey Lanier

H. Dorsey Lanier has been named sales representative for National Ring Traveler Co. Mr. Lanier will represent National and its Sterling Division in Georgia and Alabama, from headquarters in Shawmut, Ala.

W. Basil Hill has been named manager of Mooresville (N. C.) Mills, a division of Burlington Industries Inc. Mr. Hill was formerly vice-president of product development and a director of Mooresville Mills Inc. He will have over-all management of the plant. Prior to coming to Mooresville last December, he was plant manager of Abbeville (S. C.) Mills Corp. Prior to that he had been associated with Pomona Mfg. Co., Greensboro, N. C., and Callaway Mills, LaGrange, Ga. . . . Berry Bland Jr., with the Cramerton Division of Burlington since 1931, has been transferred to Mooresville as superintendent of manufacturing. . . . Hayden C. Cobb Jr., vice-president in charge

of manufacturing and a director of Mooresville, has resigned. He had been with the firm about 18 years. . . . Edward J. Mack has been named to an executive position with Burlington Industries in the controllers' department. Mr. Mack resigned as controller of Dan River Mills, Danville, Va., May 21. . . . Carlyle B. Lewis, personnel and administrative director of Burlington Industries, has been elected president of the Associated Industries Inc. of High Point, N. C., a civic organization composed of leading industries in the High Point-Thomasville-Jamestown manufacturing area.

A. D. Winquist Jr. and Marcus French, for the past several years engaged in chemical research with the new products division of National Aniline Division, Allied Chemical & Dye Corp., New York, have been assigned to the chemical sales department of the company. Mr. Winquist will be attached to the sales service section while Mr. French will act as a technical sales representative. The new assignments are part of an expansion program within National Aniline Division sales and technical service activities

incident to completion of new facilities for production of adipic acid, caprolactam and other chemicals at Hopewell, Va., and the new plant at Moundsville, W. Va., for maleic anhydride, fumaric acid, aniline and isocyanates.



W. E. Prescott

Winthrop E. Prescott has been named director of purchasing for The Kendall Co., Boston, Mass., succeeding Ralph S. Howland, who has relinquished his supervisory duties in anticipation of retirement in September. Mr. Prescott, assistant director of purchasing for the past year-and-a-half, joined the company in 1946 as purchasing agent for the company's cotton mill division, with headquarters in Charlotte, N. C. Mr. Howland had been director of purchasing since 1929.

Edward Lee Chambers, assistant purchasing agent for Cone Mills Corp., Greensboro, N. C., since 1947, has been promoted to the position of purchasing agent. He succeeds Woodrow Carruthers who asked to be relieved due to ill health. Mr. Chambers has been with the company since 1933. Succeeding him as assistant purchasing agent is George Nance, formerly assigned to the purchasing department. Mr. Carruthers remains active with the company in a special assignment. . . . A. Carl Lee has been appointed assistant to Sidney Bluhm, cotton buyer for Cone. Mr. Lee has been supervisor of cotton purchasing at the company's Dwight Division, Gadsden, Ala., for the past four years and will continue to be in complete charge of those operations. He will make his headquarters in Greensboro.

Frank Roberts, vice-president of Amertron Corp., has been named manager of production in the company's area "B" mills which includes the former Robbins plants at Aberdeen, Red Springs, Robbins and Raeford, N. C., and Clarkesville, Va., and the former American Woolen plant at Raleigh, N. C. He will make his headquarters in Aberdeen, where Amertron recently authorized construction of a large administration building. . . . J. B. Tollison, former group manager in area "C", has been transferred to Aberdeen where he will report to Mr. Roberts as group manager of group "B" mills. . . . Albert Grant, also vice-president of Amertron, has been named manager of the company's former Textron



Vernon, Miss Allen, Neese, Browder

'MISS LIZZIE' HONORED—Miss Elizabeth Allen, receptionist at the main offices of Dan River Mills, Danville, Va., was honored recently by Dan River officials and visiting salesmen following her retirement after 22 years with the company. Known as "Miss Lizzie" to hundreds of salesmen who called on Dan River, Miss Allen was the first woman to retire from the company's office staff at the age of 65. She had been with Dan River 22 years and was the first full-time telephone switchboard operator for the company. Attending a special dinner in her honor were 27 salesmen, as well as Dan River executives, departmental officers and office workers. Shown congratulating her above is Dallas C. Neese, secretary of Odell Mill Supply Co., Greensboro, N. C. Looking on are C. Miller Vernon, director of purchases for Dan River, who acted as toastmaster, and Basil D. Browder, Dan River executive vice-president. The salesmen attending presented her with a cashier's check along with their well-wishes.

mills in the Anderson, S. C., area and the former American Woolen Co. plant at Tifton, Ga. He will make his headquarters in Anderson. . . . E. H. Hines has recently joined the organization as group manager of the worsted and worsted blend manufacturing operations.



Ira S. Hurd

Ira S. Hurd has been appointed technical director and sales manager of Moretex Chemical Products Inc., Spartanburg, S. C., a wholly-owned subsidiary of Moreland Chemical Co. Inc. Mr. Hurd will make his headquarters in Spartanburg, assuming direction of sales of new as well as established products. He formerly has been associated with Warwick Chemical Co., Dan River Mills and Rohm & Haas Co.

James C. Self, president of Greenwood (S. C.) Mills, was recently presented an Horatio Alger Award, given annually to men whose careers have followed the Horatio Alger pattern of from "rags to riches." Mr. Self received the award at Duke Hospital, Durham, N. C., where he has been a patient for some time. His illness prevented him from attending the regular presentation ceremony honoring other industrial leaders which was held in New York City. The awards are sponsored by the American Schools and Colleges Association.

Giles E. Hopkins, who resigned recently as technical director of the Wool Bureau, has been appointed research director of the Rayon & Acetate Fiber Producers Group. The post is a new one and, for the present, Mr. Hopkins will make his headquarters at the group's New York office.

William T. Burgin and V. J. Dionne have joined the Vicara sales department, fiber division, of Virginia-Carolina Chemical Corp. Mr. Burgin was formerly with the cotton division sales department of Robbins Mills. Prior to that he was head of the converting department of Southeastern Cottons Inc. Mr. Dionne was formerly with the textile division of the U. S. Rubber Co. Before that he was professor of fabric technology at St. Hyacinth Textile School in Canada. Both men will contact weaving mills and the converting trade from headquarters in New York City.

Samuel Lenher, assistant general manager of Du Pont's organic chemicals department, has been elected a director, vice-president and member of the executive committee of the company. During his 26-year career with Du Pont, Mr. Lenher has been engaged in research, production, sales and, in more recent years, with administrative functions. He has also taken an active role in the affairs of the chemical industry and is currently serving as president of the Synthetic Organic Chemical Manufacturers Association. . . . Richard A. Hrabe has been appointed assistant manager of Du Pont's nylon plant at Seaford, Del. He succeeds Robert W. Seitz who was recently appointed manager of the Chestnut Run operations at Wilmington, Del., which includes sales

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PERSONAL NEWS

service laboratories of the textile fibers, polychemicals and film departments. Mr. Hrabe was formerly manager of the Yerkes rayon plant at Buffalo, N. Y., which closed its operations the first of May. He joined Du Pont at Old Hickory, Tenn., as a student operator in 1933 while working on his college degree at Georgia Tech, where he received his bachelor of science degree in chemical engineering in 1935. . . . Charles A. Cary has retired as a vice-president and member of the executive committee of Du Pont, after a career of 37 years. He retains his position as a member of the Du Pont board of directors. Mr. Cary has been

a vice-president and member of the executive committee since 1946, when he stepped up from the post of assistant general manager of the rayon department, now the textile fibers department. He had had at that time more than 20 years in Du Pont's textile fibers manufacturing and management activities.

W. O. Reed has been named general overseer of spinning, winding and warping at Selma (N. C.) Mills Inc.

Ralph L. Howland has been named manager of communications and public relations, a new post, of Chatham Mfg. Co., Elkin, N. C. Mr. Howland, a veteran newspaperman, has resigned as Raleigh, N. C., bureau

manager for the *Charlotte Observer*, effective June 1. A native of Henderson, N. C., and a graduate of Duke University, Mr. Howland was formerly with the Associated Press in Charlotte and Washington, D. C. . . . Gene Hall, formerly manager of the commissary and grill at Chatham, has been appointed special assistant to the president.



Richard K. Rees

Richard K. Rees has been named superintendent of Arcade Cotton Mills, Rock Hill, S. C. Mr. Rees was formerly with the Kershaw, S. C., plant of The Springs Cotton Mills.

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William G. Stanton has been appointed sales representative in the Atlanta, Ga., office of Whitin Machine Works, Whitinsville, Mass. Mr. Stanton was formerly Southern district sales manager of Diehl Mfg. Co.

Robert R. Hunt, formerly assistant overseer of spinning for Riegel Textile Corp., Ware Shoals, S. C., has been named overseer of carding at The Jefferson (Ga.) Mills Inc.

R. W. Wolfe has been named superintendent of Pepperell Mfg. Co., Dunson Division, LaGrange, Ga.

F. P. Mullendore has been named superintendent of the Douglas Division of Glendale Mills Inc., Douglasville, Ga. Mr. Mullendore was formerly superintendent of Darlington (S. C.) Mfg. Co.



W. L. Verlenden

W. Lane Verlenden has been elected assistant treasurer of Standard - Coosa - Thatcher Co., Chattanooga, Tenn., succeeding Roy Butler, who has retired. Mr. Verlenden, who will continue in his present capacity as chief engineer in addition to his new duties, has been associated with Standard - Coosa - Thatcher since 1935. He was elected a member of the board of directors in 1953. His grandfather, W. Lane Verlenden, was one of the founders of the company, and his father, J. S. Verlenden, was actively associated with it for many years before his retirement in 1949.

Roger Milliken of Spartanburg, S. C., president of the Deering, Milliken chain of mills, has been elected a trustee of the South Carolina Foundation of Independent Colleges, which receives scholarship distributions by numerous national corporations.

Frank C. Williams Jr. has been named superintendent of Mill No. 1, Roanoke Mills Co., Roanoke Rapids, N. C., succeeding A. O. Pendleton, who retired May 1. Mr. Williams, a graduate of N. C. State College School of Textiles, has served as assistant superintendent of Patterson Mills Co., Roanoke Rapids, and with Simtex Mills, Roanoke Mills' New York selling agency.

He has been with the company since 1952, except for a two-year period of service with the U. S. Navy. Mr. Pendleton had been associated with Rosemary Mfg. Co. from 1913 until 1917, and with Roanoke Mills' No. 2 Mill from 1918 to 1929. He was made superintendent of Mill No. 1 on Jan. 1, 1929.



J. Fred Murray

J. Fred Murray has been named to head the newly-formed fabric development department of The Chemstrand Corp. The new department has been set up to give added service to Chemstrand customers because of the rapid growth in the use of Acilan acrylic fiber and Chemstrand nylon yarn. Mr. Murray has been active in the Acilan sales division of Chemstrand for the past eight months. Prior to that he was with Fox-Wells & Co. and Turner Halsey Co. . . . Also named to the fabric development department as a textile technologist is Paul E. Stocker. Before joining Chemstrand, Mr. Stocker was in the fabric development department of Greenwood Mills Inc. Prior to that he had worked on fabric development for Verney Corp. and E. I. du Pont de Nemours & Co. Inc. . . . Donald W. Bedell has joined Chemstrand as an Acilan sales specialist. He will be responsible for sales development of Acilan in the woolen and worsted industry. Before joining Chemstrand he was a representative for Meinhard & Co., and had been assistant to the executive vice-president of Crompton-Richmond Co. Prior to that he was assistant to the sales manager of Draper Bros. Co.

E. S. McKissick has been assigned the responsibility for setting up and taking charge of a quality control program for the fabric conversion operation of Goodyear Clearwater Mills, Mill No. 2, Rockmart, Ga. Mr. McKissick was transferred to Rockmart from the Akron, Ohio, offices of the parent company, Goodyear Tire & Rubber Co.

Neil B. Conley has been appointed director of sales of the organic chemicals division of American Cyanamid Co. Mr. Conley joined Cyanamid in 1931 as manager of the Ultramarine Co., New York City. In 1940 he was made sales manager of the jobber and resale department at the company's Bound Brook, N. J., plant, and in 1954 was appointed assistant director of sales for the organic chemicals division. Prior to his association with Cyanamid, Mr. Conley was president of the National Ultramarine Co., Cincinnati, Ohio.

Thomas H. Roberts has retired as director and technical vice-president of Arnold, Hoffman & Co. Inc., Providence, R. I. Mr. Roberts began his career in the manufacture of dyes and intermediates in 1915. In 1922 he became associated with Arnold, Hoffman as a chemist. In 1925 when Arnold, Hoffman transferred its dyestuffs operation from Providence to Dighton, Mass., he was put in charge of dyestuffs as technical director. He was elected a vice-president of the company in 1937. When the company became



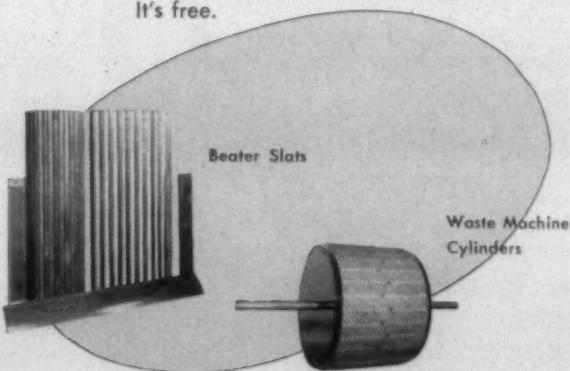
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PERSONAL NEWS

part of Imperial Chemical Industries Ltd. of London, England, in 1950, Mr. Roberts was named a director of Arnold, Hoffman, and two years later he was elected technical vice-president in charge of research, production and engineering.

Dr. Carlyle G. Caldwell and John F. Fitzgerald have been appointed vice-presi-



Dr. C. G. Caldwell



John F. Fitzgerald

dents of National Starch Products Inc., New York City. Dr. Caldwell has been assistant vice-president in charge of research since 1952. He joined the company's research staff in 1940. Mr. Fitzgerald began his association with the company in 1935 as a technical salesman to the textile industry and successively became manager of textile sales and then of starch sales. He was appointed assistant vice-president in charge of starch sales in 1953.

William D. McBee, overseer of spinning at the Monarch Plant of Monarch Mills, Union, S. C., has been promoted to plant superintendent. Mr. McBee has been with Monarch since 1947. In February of 1950 he became a second hand in the spinning department. William Ernest Lancaster succeeds him as spinning overseer. . . . James Henry Good, cloth room overseer at the company's Lockhart, S. C., plant, has been promoted to personnel manager.

Rock Hill (S. C.) Printing & Finishing Co. has announced the following recent promotions: David Vipperman, formerly in charge of quality control at the plant, has been named divisional superintendent of the new Grier division; Sam Dunlap has been named day foreman in charge of finishing; Charlie Smith, day superintendent of printing, soaping and coloring; John W. Madden, night superintendent of printing, soaping and coloring; Levern Huckabee, night foreman in charge of finishing; Dick Neely, night foreman in charge of the color shop; and Roy Massey, day foreman in charge of the color shop.

C. Henry Lumpkin has been elected vice-president and general manager of Printed Fabrics Corp., Carrollton, Ga., succeeding Paul W. Kase, who has resigned. . . . John Hennessey has been named technical assistant to Mr. Lumpkin. Mr. Hennessey was formerly with the print works division of Joseph Bancroft & Sons of Eddystone, Pa.

John S. Brice has joined the chemical division of the Goodyear Tire & Rubber Co. as a field representative in the Southeastern territory, headquartered in Atlanta, Ga. He will specialize in sales and service to the textile industry in Goodyear's line of Chemigum, Pliolite and Pliovic latices.

Mr. Brice is well known in the industry through his experience in textile development and sales service work both in the South and Midwest. He is a graduate of Coe College, and received a master's degree from the Institute of Textile Technology. He is a member of the American Chemical Society and the American Association of Textile Chemists and Colorists.

Henry F. Dever, president of Minneapolis Honeywell Regulator Co., Brown Instruments Division, Philadelphia, Pa., was recently elected president of the Scientific Apparatus Makers Association. Included among those elected section chairmen of the association were L. B. McKinley, vice-president of the scientific instrument division, Bausch & Lomb Optical Co., Rochester, N. Y.; and B. H. Bristol, president of The Foxboro (Mass.) Co.

Elliott C. Paddock, vice-president in charge of sales of the Graton & Knight Co., Worcester, Mass., has retired. Succeeding him is John G. Henrikson, who has been with Graton & Knight since 1917. For the past five years Mr. Henrikson has been assistant sales manager. Mr. Paddock had been with the company since 1949 when he came out of retirement to head the sales department. . . . Homer LaRue, formerly field sales supervisor for the company, has been named assistant sales manager, succeeding Mr. Henrikson.

William Bryce Haynes of Raleigh, N. C., 27-year-old Korean veteran, has been chosen the 1955 winner of the \$400 Keever Starch Co. Scholarship in the School of Textiles at North Carolina State College. Announcement of the selection of Mr. Haynes to receive the award was made by G. H. Dunlap, chairman of the scholarship committee and director of the Placement Bureau in the School of Textiles. Mr. Haynes, a senior in textile weaving and design, ranks in the upper ten per cent of his senior class scholastically and is highly active in extra-curricular activities. Upon his graduation in August, he plans to work for Roanoke Mills Co., Roanoke Rapids, N. C.

W. R. Boyer, comptroller of the A. E. Staley Mfg. Co., Decatur, Ill., has been elected treasurer of the company, and L. S. Roehm, manager of the company's corn division, has been named a vice-president, following a recent meeting of the board of directors. Mr. Boyer has been with the company since 1934 and comptroller since 1948. Mr. Roehm has headed the corn division since 1951.

George O. Porter has resigned as superintendent of Hart Cotton Mills Inc., Tarboro, N. C.

Consolidated Textile News, house organ of Consolidated Textile Co. Inc., Lynchburg, Va., its editor, Edward W. Daniel, and Verne O. Bobbitt, personnel director of the Lynchburg division of the company, were recently honored over television station WTVR, Richmond, Va., by Freedoms Foundation of Valley Forge, Pa., for their contributions toward a better understanding of the American way of life. The Foundation presented Mr. Bobbitt with a George Washington Honor Medal and a national second place award check for an article "The Mir-

acle That Is America," which appeared in the employee publication. The publication and its editor also received honor medals for outstanding achievement in furthering the creed and principles of The Freedoms Foundation.

Morton H. Darman has been named president of The Top Co., Boston, Mass., the new top-making firm recently formed through the merger of three firms—Arthur I. Darman Co. Inc., Walker Top Associates and Draper Top Co. Mr. Darman was formerly president of Arthur I. Darman Co. Other officers of the merged firm and their former associations include: vice-presidents, S. Willard Bridges, Walker Top; Arthur I. Darman, Arthur I. Darman Co.; Thomas F. Draper, Draper Top; and E. Bradford Keith, Walker Top; treasurer, Edward L. Burnham, Draper Top.



Allen N. Holt

Allen N. Holt has been named district sales manager of the Hinde & Dauch corrugated box plant at Gastonia, N. C., scheduled to be in production by early July. Mr. Holt, who has been with the company since 1945, will be in charge of the sale of all material produced by the plant. He was formerly in charge of the company's sales office in Greensboro, N. C. . . . Other appointments include those of Richard T. Bloker as plant production manager and Charles V. Dodge as office manager. Mr. Bloker has been with Hinde & Dauch since 1934, and his most recent assignment was as general foreman at the firm's Richmond, Va., plant. Mr. Dodge will be responsible for administrative matters at the plant. He has been with the company since 1948, and will report to Gastonia from the main Hinde & Dauch office in Sandusky, Ohio.

M. L. Brackett, formerly general superintendent of the Charlotte, N. C., plants of Highland Park Mfg. Co., has been named general manager of the plants (Nos. 1 and 3), and Z. G. Willis, formerly superintendent, has been appointed general manager of Mill No. 2 at Rock Hill, S. C. They assume duties of the late Arthur S. Jarrett who died April 12. He had been general manager of all three plants since 1937. . . . W. H. McKeown has been promoted to general superintendent of the Charlotte plants, succeeding Mr. Brackett.

Henry J. Williams, assistant controller for M. Lowenstein & Sons, has been named controller of the firm's Lane Cotton Mills Co., New Orleans, La.

W. H. Stallworth of Spartanburg, S. C., has been named production superintendent of Darlington (S. C.) Mfg. Co., succeeding F. P. Mullendore, who resigned.

D. J. R. Suffredini has been named president of Pendleton Mfg. Co., with plants at LaFrance and Pendleton, S. C., succeeding Paolini Gerli. Mr. Gerli is board chairman of LaFrance Industries, of which Pendleton is a subsidiary. Mr. Suffredini was

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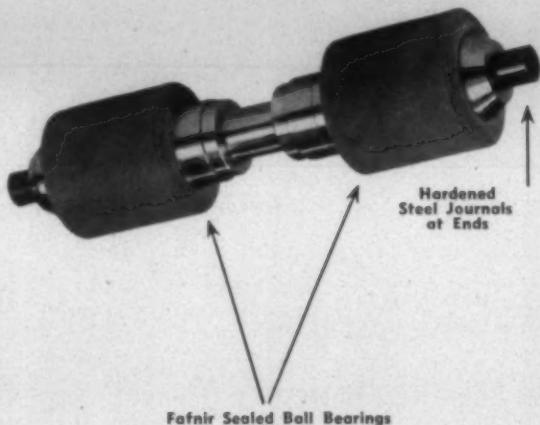
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PERSONAL NEWS

treasurer and vice-president of the Pendleton plant, general manager and vice-president of the LaFrance plant, and treasurer of La France Automotive Fabrics Inc., Anderson, S. C.

John R. Sherrill has been appointed sales manager of acetate yarn and staple for Eastman Chemical Products, effective June 1. Mr. Sherrill, who has been assistant sales manager, has been with the company since 1938. He will continue to make his headquarters at Kingsport, Tenn.

Robert J. Mebane Jr. has been named to the sales staff of American Enka Corp., Enka, N. C. Mr. Mebane for 21 years was Enka's Piedmont North Carolina district sales manager prior to his retirement in 1952. He succeeds Crawford Smith in the Chattanooga, Tenn., area. . . . Ted E. Patton has been promoted to chief plant engineer for Enka's Lowland, Tenn., plant. He has been with the company since 1946. . . . H. G. Heedy, assistant chief industrial engineer for the company since 1950, has been named chief industrial engineer, succeeding Fred A. Wayant, who has retired. Mr. Heedy has been with the company since 1946.

W. J. Pharr, treasurer and vice-president of Stowe Mills Inc., McAdenville, N. C., has been elected mayor of McAdenville.

Vic Phillips of Groves Thread Co., Gastonia, N. C., has been elected to the Gastonia City Council.

OBITUARIES

Hal Pond Eastman, 70, retired vice-president and director of American Cyan-

amid Co., died May 4. Mr. Eastman was president of North Cyanamid Ltd., Cyanamid's Canadian subsidiary, from 1943 to 1950. He was elected a vice-president and director of the parent company in 1947. Following his retirement in 1950, he continued his relationship with the company as a consultant until his death. He is survived by his widow, a daughter and four sons.

Samuel E. Elmore, 72, president of The Elmore Corp., Spindale, N. C., died April 20 at Spindale. Mr. Elmore, a native of Milwaukee, Wis., has been a manufacturer of mercerized hosiery yarns in Spindale since 1920, and was a former Spindale mayor.

C. Scott Lewis, 58, vice-president in charge of the sale of finishing for Fairforest Co., Spartanburg, S. C., died recently. Mr. Lewis had been with Reeves Bros., of which Fairforest is a wholly-owned subsidiary, more than 25 years. Before that he had been with Riegel Textile Corp., Ware Shoals Finishing Co., Southern Bleachery and Union Bleachery. Surviving are his widow and a daughter.

Frank W. Mattinson, 54, former general manager of the Skenandoa Rayon Corp., Utica, N. Y., died April 27 in Utica. Retiring in 1950, Mr. Mattinson became industrial consultant to rayon manufacturers in the Orient, Europe and South America. Survivors include his widow, his mother, five brothers and four sisters.

Tucker McCravy, an associate of Hank D. Jones Co., manufacturers' agent for Raybestos-Manhattan Inc., died May 6 in Lexington, Ky. Mr. McCravy formerly represented Raybestos-Manhattan in North and South Carolina and part of Georgia before joining Pacific Mills at Lyman, S. C., as di-

rector of purchases for the cotton mills. He joined Hank D. Jones Co. in January 1954. He is survived by his widow and two sons.

George M. Miller, 67, chairman of the board of the Turner Halsey Co., died April 24 in Amityville, L. I., N. Y. Mr. Miller became president of Turner Halsey in 1930 and chairman of the board in 1951. He was a director of Arcade Cotton Mills, Rock Hill, S. C. He is survived by his widow, two sisters and a brother.

Claud Dowling Morris, 60, vice-president and general manager of Palmetto (Ga.) Cotton Mills Inc., died May 8. Mr. Morris had been with Palmetto since 1939 when he joined the company as assistant superintendent. Surviving are his widow, a daughter, a brother and a sister.

G. Ward (Pete) Randall Sr., 83, retired purchasing agent for American Thread Co., died April 21 in East Orange, N. J. Mr. Randall retired in 1944 after 45 years with American. His son, G. Ward Jr., is executive director of Worth Street Inc. Other survivors include his widow and a daughter.

J. Paul Smith, 64, president of Visking Corp., died May 4. Mr. Smith had been with Visking since 1931, joining the company as vice-president and treasurer. He had been president of the firm since 1948. Prior to 1931, he had been with Du Pont, from 1912 to 1931. He is survived by his widow.

George W. Staples, 49, in charge of converting at the Lyman (S. C.) Division of Pacific Mills, died recently. Mr. Staples had been with Pacific the past 25 years. Survivors include his widow, a sister and two brothers.

MILL NEWS

CONSTRUCTION, NEW EQUIPMENT, FINANCIAL REPORTS, CHARTERS, AWARDS, VILLAGE ACTIVITY, SALES AND PURCHASES

FRONT ROYAL, VA.—Production of rayon tire yarn and rayon staple has been resumed on a reduced scale at the plant here of American Viscose Corp. Production at the plant had been halted May 2 from damages sustained in a fire.

LOWLAND, TENN.—American Enka Corp. has announced plans to construct a multi-million dollar rayon staple fiber unit here. Estimates place the cost of the unit, with a production capacity of 50 million pounds a year, in the neighborhood of \$20 million. Construction is expected to get underway in the late Summer or early Fall of this year, with completion scheduled for late 1956. The company recently added facilities for the manufacture of nylon at its Enka, N. C., plant, and is also constructing a new research center there.

BARNWELL, S. C.—Amerotron Corp. has announced plans to build a 400,000 square foot woolen mill here that will employ approximately 1,000 people. According to Robert L. Huffines Jr., president of Amerotron, the plant will manufacture staple

and semi-novelty fabrics. Operations will include spinning, weaving and finishing. Lockwood Greene Engineers Inc. is designing the plant; Barnes Textile Associates Inc. will be technical advisor; and Daniel Construction Co. will erect the building, cost of which is estimated at \$9 million.

BETHUNE, S. C.—Construction is proceeding rapidly on the new finishing plant here for Kendall Cotton Mills. The plant will contain 300,000 square feet of floor area. It is expected to be completed next Spring.

KERSHAW, S. C.—A new supply room containing some 58,000 square feet of floor space has been completed here at the plant of The Springs Cotton Mills. The new facility is one of several improvements being made in the current Springs expansion program. A new two-story cotton warehouse with 30,000 square feet of floor space is nearing completion at the company's Lancaster, S. C., plant, and an additional finished goods warehouse with 180,000 square feet of storage space is being erected at the

company's finishing plant at Grace's Station. Just recently completed at the bleachery was a supply warehouse with 77,000 square feet of area. Installation has also begun on a refrigeration system for the huge sewing room at the bleachery which will cost approximately \$150,000.

MONROE, N. C.—Stockholders of Union Mills Co. and Monroe Mills Co. have voted unanimously to merge interests, with Union the surviving corporation. As a result, Monroe Mills' properties will be offered for sale and the Union Mills' plant will be expanded to provide for installation of 5,000 additional spindles. Albert S. Orr is president and treasurer of the new corporation. David R. Johnston, president of Johnston Mfg. Co. and Highland Park Mfg. Co., both of Charlotte, N. C., is vice-president, and Donald Jonas of Charlotte is secretary.

BLACKSBURG, S. C.—R. C. McCall, president of McCall Mfg. Co., Greer, S. C., is negotiating for purchase of Broad River Mill, here, with R. C. Hamrick, head of the Hamrick chain of textile interests. Accord-

ing to Mr. McCall, the negotiations should be completed soon. Broad River Mill is capitalized at \$182,000 and was incorporated in 1913. If an agreement is reached, the plant will be closed down for modernization or the machinery will be disposed of and a new industry located in the mill village. The plant employs 260 persons.

LANDRUM, S. C.—Rhode Island Textile Mfg. Co., Pawtucket, R. I., has obtained option on a site here preliminary to constructing a braid producing plant.

GREENVILLE, S. C.—Union Bleachery here is installing dialyzing equipment as a move toward reducing pollution of water emptied by the plant into Reedy River, which flows through the city. The installation, to cost about \$250,000, permits recovery of the caustic solution used in bleaching and dyeing. The move is a "public policy" attempt to reduce offensive odors emanating from the river, particularly in time of low water. P. C. Gregory, Union general manager, points out that the plant's "worst waste" never enters the stream, but is carried by Greenville sewer lines. The new installation will be completed this summer.

YORK, S. C.—Neely Mills Inc. has converted its 42,000 square foot plant here for the production of yarn from Acrlan acrylic fiber. The plant, which produced carded cotton yarn until last January, expects to produce 30,000 pounds of spun yarn from Acrlan a week. James C. Cloniger, who sold the plant to Hyde-Rakestraw Co., Philadelphia, Pa., in 1949, will be general manager of the plant.

STATESVILLE, N. C.—J. W. Abernethy Sr. of Newton, N. C., has leased his combed yarn plant here to Trenton Cotton Mills, Gastonia, N. C. The firm was under lease to Mooresville Mills until Mooresville was taken over some weeks ago by Burlington Industries Inc. Mr. Abernethy, former Mooresville president, is also president of Trenton.

LAFAETTE, GA.—LaFayette Mills Inc., a new organization, is being formed here in an attempt to re-open LaFayette Cotton Mills, closed since last July because of income tax difficulties. Some 90 LaFayette business and professional men have sub-

scribed \$80,000 to buy stock in the new corporation. They reportedly plan to put up another \$20,000 in order to own a third of the capital stock in LaFayette Mills Inc. The idle mill was purchased at public auction last Dec. 7 by J. W. Valentine Co. of New York, which is now negotiating with the federal government for settlement of a \$108,000 income tax lien. The mill was employing some 275 workers making jeans and coutils when it was closed.

DUBLIN, GA.—J. P. Stevens & Co. Inc. has announced plans for expanding facilities at its Dublin Woolen Mills here. The expansion will include the erection of a plant containing some 220,000 square feet of floor area, to be built adjacent to the present plant. The new operation will be a completely integrated plant manufacturing stock-dyed fabric for the men's and women's wear trades. It is expected to be in partial operation by Jan. 1, 1956. The expansion does not indicate any forthcoming reduction in activity at the company's other woolen and worsted plants, Stevens points out. The company has three other plants in the South—at Rockingham, N. C., Milledgeville, Ga., and Dublin, Ga. Roberts & Co. Associates, Atlanta, Ga., is designer and engineer for the expansion program.

ALBEMARLE, N. C.—Collins & Aikman, the nation's largest weavers of upholstery fabrics, has announced plans to construct a

\$2,500,000 dyeing and finishing plant near here. Construction is expected to start within 30 to 60 days and be completed by the end of the year. The new plant is being built to enlarge and modernize the company's capacity for dyeing and finishing fabrics, according to Robert W. McCullough, executive vice-president in charge of manufacturing for the company. It will be equipped with the most modern machinery to reduce material handling costs and to increase the rate of production. The new plant will replace the quarters which Collins & Aikman operates at 51st Street and Parkside Avenue in Philadelphia, Pa., where the company now dyes and finishes 50 percent of the automotive, furniture and transportation upholstery fabrics and automotive carpeting produced in its Southern weaving mills. The Albemarle plant will be within a short distance of the company's four North Carolina mills—the weaving mills at Roxboro, Siler City and Concord, and the spinning mill at Norwood. Collins & Aikman's sixth Southern mill, acquired in March, is located at Dalton, Ga., where the company produces tufted carpeting for automobiles. Production will be shifted gradually from Philadelphia to Albemarle over an 18-month period after the plant is built. Included in the transfer will be the company's research laboratories for weaving and dyeing, which are among the largest in the textile industry.

Firestone

2000
YEARS OF SERVICE

Mercer, Karl, Firestone, Mrs. Wilson, Trainer, Kessell

20-YEAR SERVICE AWARDS—Representative of the 100 employees of Firestone Textiles Inc., Gastonia, N. C., who were honored at the plant's 20-year service banquet May 5 is Mrs. Eula Wilson, payroll supervisor. Mrs. Wilson was the first person to be employed at the plant when Firestone began operations in 1935. Shown presenting Mrs. Wilson her service pin and watch are Harold Mercer, general manager of the plant; William A. Karl, president of Firestone Textiles; Raymond C. Firestone, executive vice-president of The Firestone Tire & Rubber Co.; J. E. Trainer, also executive vice-president of the parent company; and Nelson Kessell, general superintendent of the plant. The service award dinner was one of the highlights of a five-day program of plant tours and other events celebrating Firestone's 20th anniversary in Gastonia. An estimated 14,000 persons toured the plant during the celebration, which was climaxed Saturday, May 7, with a barbecue, special entertainment and a square dance for employees and their families.

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A.S.T.M. Marburg Lecturer: Walter Hamburger

Of more than incidental interest among textile men in the forthcoming annual meeting of the American Society for Testing Materials will be the appearance by Dr. Walter J. Hamburger as 1955 Marburg lecturer. Dr. Hamburger, director of Fabric Research Laboratories Inc., Boston, Mass., will speak on "A Technology for the Analysis, Design and Use of Textile Structures as Engineering Materials."

The A.S.T.M. meeting, scheduled June 27 through July 1 in Chalfonte-Haddon Hall, Atlantic City, N. J., will feature seven symposiums and 32 technical sessions. The Marburg Lecture will be presented Wednesday, June 29, at 4:30 p. m. During the week, Committee D-13 on Textile Materials will take part in a number of technical sessions.

* * *

What is Committee D-13? What part has it played in the successful effort of the textile industry to keep abreast with the times?

Committee D-13 can be compared to many other unsung heroes. The accomplishments have been many and of great importance to the industry; the condemnation of its work has been multitudinous, but relatively unimportant; the praise has been sparse but encouraging.

Committee D-13 is one of the largest of some 60 or 70 standing committees of the American Society for Testing Materials, familiarly known as A.S.T.M. Each of these committees represents an industry or a segment of an industry. For instance, A-1 covers steel, A-2 wrought iron, D-11 rubber, and D-13 serves the entire textile industry, including all fibers.

The committees are engaged in the "promotion of knowledge of the materials of engineering and the standardization of specifications and the methods of testing." Producers, consumers and personnel from independent agencies such as government, educational or research groups serve on these committees or their subdivisions in actively promoting the aims of the society.

Committee D-13 was organized in 1915, sometime after the origin of A.S.T.M. During the 19th Century and the early part of the 20th Century, there never was a serious surplus of production of textiles, except for minor depressions. This created a situation where the consumer had very little choice in his purchases of textiles and he bought what was offered. The terms were "Caveat Emptor" which Latin students will quickly identify as the expression, "Let the Buyer Beware."

Furthermore, the bulk of textile materials manufactured were used for wearing apparel or household uses and the strength, thickness or elasticity of the materials were not often of too great importance. The introduction of pneumatic tires, requiring a reinforcement of textile materials having high strength and uniformity, brought about a need for a "more thorough knowledge of (textile) materials and methods of testing."

Therefore, in 1915, a group of textile manufacturers, rubber chemists and engineers formed a tentative committee and were accepted by A.S.T.M. The first problem was the development of methods of testing cotton fabrics, with particular emphasis on the fabrics for tires. The tentative methods were used on a trial basis for five years. In 1920, these methods of testing cotton fabrics were adopted as the A.S.T.M.'s first standards on textile materials.

By this time, the producers of rubber hose, belting,

pyroxylon-coated materials and others, recognized the value of standardized methods of testing and began to establish specifications for material purchased. No longer were all buyers satisfied with just any material and they demanded yarns or fabrics that would meet specified requirements by A.S.T.M. methods of testing.

In the last 35 years, it is natural that the activities of Committee D-13 have been broadened to cover textile materials made from fibers other than cotton. The woolen and worsted industry became active in 1931; the rayon industry developed all of its important standardization work under A.S.T.M. auspices; asbestos, hard fiber and glass fiber groups were formed in the late 30s; and the present organization of Committee D-13 recognizes all fibers, whether past, present or future.

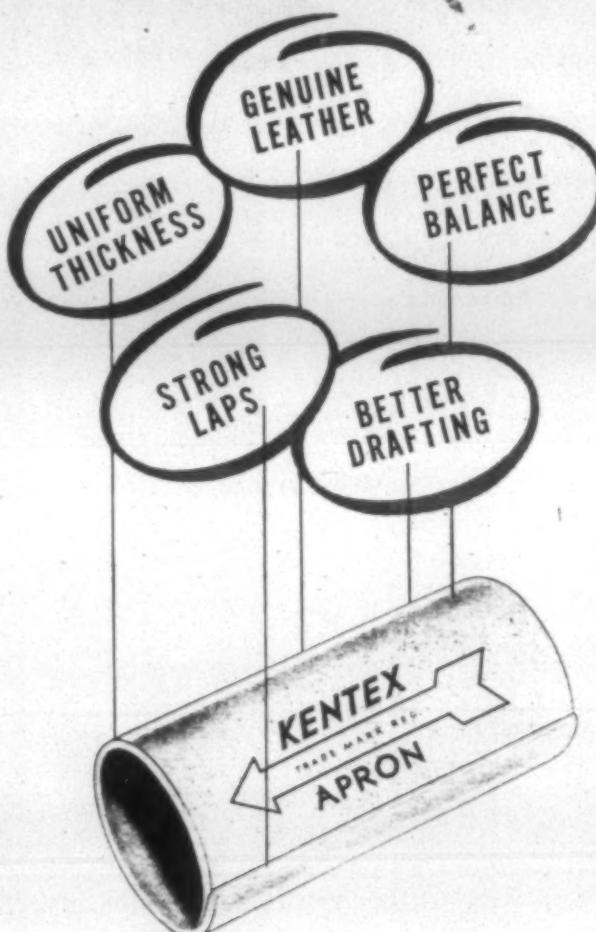
Furthermore, the original concept of developing methods of testing cotton materials has been widened out to the extent that many specifications for construction and allowable tolerances of textile materials have been established. Textile terms, definitions, defects and other controversial items have been clarified and standardized for the benefit of producers and consumers in commercial transactions. All of these features are evident in the A.S.T.M. Standards on Textile Materials, which in 1954 contained 700 pages compared with less than 25 pages in 1920. Of course, the growth in importance of A.S.T.M. Committee D-13 to the industry has been in direct relationship to the growth of the pamphlet and there are close to 400 people holding membership in the committee at the present time.

Committee D-13 has been an unsung hero in the industry, as stated previously. It is reasonable to assume that many textile producers test fibers, yarns and fabrics day in and day out, using A.S.T.M. methods of test, without any realization of the time and effort put forth by a small group of textile firms and people in establishing these methods. These producers spend money to install air conditioning in their laboratories and advertise their eminence in quality control, but don't seem to realize that Committee D-13 made this possible by consistently maintaining a standard atmospheric condition of 70° F., 65 per cent relative humidity for all textile materials.

Many textile manufacturers have criticized Committee D-13 for their deliberation before establishing a method or a standard. They should have been present at some of the meetings when the merits of grab vs. strip test, tongue vs. trapezoid, A vs. B yarn ratings and other controversial subjects were discussed. The obvious answer is that standards have been established which are reasonably satisfactory to both producers and consumers, in spite of the legitimate and healthy differences of opinion, which so often delay the adoption of a standard.

Committee D-13 has been praised and its work has been outstanding. Prof. Herbert Ball (who was chairman of the committee from about 1930 to about 1952 and deserves all the kudos anyone can shower on him) expressed the position of Committee D-13 in his address to the society as president in 1943. "It is very clear that the textile industry recognizes in the A.S.T.M., a central organization, covering the entire fiber field, and doing practical, scientific standardization work of the broadest scope."

The work of the committee has continued and each year finds revisions of long established standards, elimination of outmoded methods or specifications and introduction of new ones. The textile industry needs Committee D-13 now



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more than it ever did and as long as babies wear diapers and caskets are lined, it is reasonably certain that Committee D-13 will continue to function.—*B. L. Whittier.*

Textile Electrical Meeting June 30

A conference on proposed and recommended electrical practices for installation and use of electrical machinery and devices in the textile industry will be held Thursday, June 30, during the five-day Summer general meeting of the American Institute of Electrical Engineers, at Swampscott, Mass. Victor F. Sepavich of Worcester, Mass., is chairman of the A.I.E.E. textile sub-committee.

The recommended practices are the culmination of five years of effort by leading electrical men in the textile industry, Mr. Sepavich pointed out, and the conference will be concerned principally with making them available to principal textile machinery manufacturers and textile mill personnel.

In an industry as large as textiles, he said, it is only natural that different interpretations are placed on the use of electrical equipment and it will be the purpose of the conference to show that all these interpretations can be grouped under recommended electrical practices to act as a guide to those using electricity in their plants.

The conference will be divided into a morning and an afternoon session. Morning session speakers will be: Mr. Sepavich, who is supervisor of engineering and research development, Crompton & Knowles Loom Works; Swaffield Cowan, Factory Insurance Association, Charlotte, N. C., and J. Dan McConnell, plant engineer, Cone Mills Corp., Greensboro, N. C.

At the afternoon session a panel of six engineers and insurance men will discuss the details of the recommended practices. The following topics will be discussed: purpose and scope of recommended practices, control circuits, control equipment, enclosures, wiring methods and practices, conduits, raceways and junction boxes, electrical accessories and low voltage limited energy circuits. On the panel will be Mr. Sepavich, Mr. Cowan, Fred Snyder, Westinghouse Electric Corp., New York; Robert R. Prechter, General Electric Co., Schenectady, N. Y.; M. R. Brice, Cutler-Hammer Co., Milwaukee, Wis., and Robert H. Clark, Warner & Swasey Co., Cleveland, Ohio.

Celanese Announces Graduate Fellowships

Celanese Corp. of America has announced that it has established 16 annual graduate fellowships in 15 colleges and universities for the 1955-1956 academic year in its continuing program to assist in the development of adequately trained technical personnel for promising careers in industry. Nine different fields of study are covered in the program including textiles, chemistry, plastics, cellulose, chemical engineering, organic chemistry, physics, engineering physics and physical chemistry. The schools participating in the Celanese program are as follows: Cornell University, Georgia Institute of Technology, Harvard University, University of Illinois, Louisiana State University, Lowell Technological Institute, McGill University, North Carolina State College, University of Oklahoma, Princeton University, Rice Institute, University of Texas, University of Wisconsin and Yale University.



Outlook Brighter For Woolen Textiles

Wool manufacturers attending the 90th annual meeting of the National Association of Wool Manufacturers, held May 5 at the Waldorf-Astoria Hotel, New York City, were told that some cheerfulness appears warranted in the wool textile industry for the first time in three years. The optimistic note was sounded by Harold J. Walter, president of the Bachmann-Uxbridge Co., Uxbridge, Mass., newly-elected president of the association.

Mr. Walter pointed out to the meeting that during the first four months of this year, as compared with the same months of 1954, sales of woven wool apparel cloths have increased about one-third. Fabrics invoiced by mills have risen about 20 per cent, he noted, and unfilled orders as of April 1 are over 50 per cent greater than a year ago.

As hopeful as this picture might appear, he said, the industry must concern itself with the possibility that this country might further reduce already low duties on imported wool textiles. Pointing out that American tariffs are no bar to foreign goods because of the 12-to-1 wage gap in favor of foreign mills, Mr. Walter stressed the fact that the industry simply asks for tariffs which would permit American mills to compete with foreign mills on fairly even terms.

Sounding a word of caution, E. D. Walen, vice-president of Pacific Mills, Lawrence, Mass., and outgoing president of the N.A.W.M., told the meeting that the nation's capital should sit up and take notice at the number of liquidations effected recently in the wool textile industry. He declared that U. S. trade policies, both national and international, should be directed so as to stimulate the growth and tone of the industry. He cited the drop in the number of looms and spindles in the industry from 1948 to 1954, and noted that while replacements of machinery and new equipment is more efficient than the old, it must be assumed that the industry's over-all capacity has been reduced. He also urged elimination of the duty on imported wool inasmuch as U. S. growers do not produce enough to meet home needs. Elimination of the duty, he said, would lead to lower prices and greater demand for wool products.

John L. Hutcheson Jr., Peerless Woolen Mills, Rossville, Ga., was elected a vice-president of the association at the meeting, and H. B. McCormac Jr., Virginia Woolen Co., Winchester, Va., was elected to the board of directors.

Management Awards To Three Mill Men

Three production officials in the Southern textile industry were among 201 executives of business and industrial firms in the United States who this month received The Research Institute of America's Award For Merit for contributions they have made to executive skills. The three: Alex Crawford, assistant plant superintendent, Joanna (S. C.) Cotton Mills Co.; P. H. Burris Jr., vice-president and general manager of Jackson Mills, Wellford, S. C.; and S. A. Mansfield, plant manager for Celanese Corp. of America, Narrows, Va.

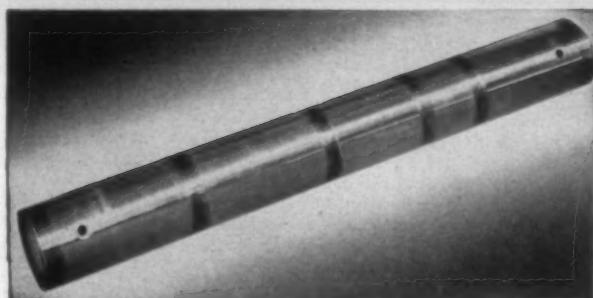
The winners, according to the institute, contributed ideas for increasing production and profits by "attention to the human element in business." Companies applying these ideas were cited for "steadily advancing the level of achievement within the framework of their own operation." The persons chosen for the award are connected with business concerns of the Research Institute, one of the world's largest business advisory organizations. Their winning entries in

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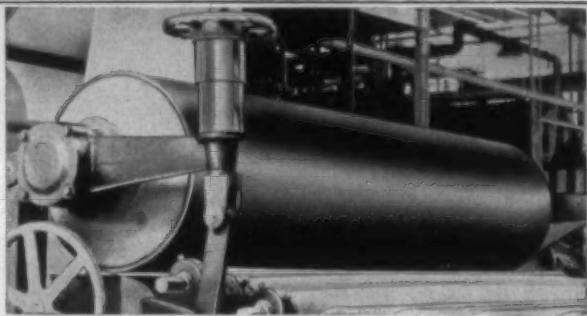
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an international contest will be published to supply business with solutions to problems of day-to-day operation. The awards were established in 1953 as part of the institute's associate membership program, which is aimed at developing managers and improving all levels of management. More than 50,000 executives, ranging from plant foremen to presidents, participate.

Also receiving this year's award were: Samuel T. Beacham and Joseph K. Leaphart, Steel Heddle Mfg. Co., Greenville, S. C.; E. T. Lindsey, plant manager, Celanese Corp. of America, Bishop, Tex.; J. H. Frick, plant manager, Celanese, Pampa, Tex.; Robert W. Durrett, production manager, Sonoco Products Co., Mystic, Conn.; Stefan L. Grapnel, chief engineer, Belding Heminway Co. Inc., Putnam, Conn.; and Edward R. Allan, vice-president for industrial relations, Celanese, New York City.

Attention: N. C. State Textile Alumni

Prof. T. R. Hart, Box 4006, State College Station, Raleigh, N. C., is trying to compile a complete list of all North Carolina State College textile alumni. If you know the present address of any of the former students listed below, please send it to Professor Hart immediately.

- Allwood, Albert—1929
- Ballard, Carl Welch—1948
- Barber, Moses Jesse—1939
- Barnes, James Wesley—1937
- Bernstein, Theodore—1938
- Boney, George L.—1938
- Brooks, Bruce W.—1934
- Bunn, Robert D.—1929
- Burbury, William Henry—1929
- Bush, George Edward—1919
- Carlin, Carl O.—1949
- Carpenter, John Samuel P.—1903
- Madero, Jose Travino—1940
- Martin, Francis S.—1937
- Mewborn, Francis Bruce—1924
- Meyer, Herbert J.—1949
- Morgan, Patrick Henry—1942
- Musso, Bernard Joseph—1939
- Oldham, George Willis—1933
- Pardue, William A. Jr.—1929
- Patterson, Geo. L.—1932
- Peele, Eunice Brown—1948
- Powell, Harry Alexander—1908
- Pulliam, Geo. W. Jr.—1948
- Quinn, A. B. Jr.—1953
- Ratchford, Robt. Henry—1928
- Robertson, Chas. B.—1949
- Robertson, Durant Waite—1906
- Rogers, Walter Brantley Jr.—1938
- Routh, B. Z. Jr.—1941
- Sarandria, Thos. Joseph—1942
- Schenckman, Howard I.—1950
- Schlenger, Harold Benjamin—1949
- Sharp, Nathan Stowe—1916
- Sharpe, Lewis Fred—1931
- Shields, Walter Dupree—1919
- Smith, Anderson J. Jr.—1949
- Smith, Eugene LaFoy—1949
- Smith, Richard Lee—1950
- Strait, John Harmon—1942
- Taylor, Edward B.—1948
- Taylor, Jackson W. Jr.—1951
- Taylor, Roland A.—1939
- Thore, Wm. Franklin—1953
- Trexler, Lonnie L.—1942
- Venia, Theodore A.—1949
- Wall, Paul Nevison—1943
- Watson, Geo. Frank—1941
- Webb, Richard C.—1949
- Weil, Henry A.—1950
- Weiss, Theodore Seigel—1950
- Williams, Jas. Edwin—1941
- Williams, James Harleigh—1906
- Winiarski, Leopold Jos.—1940
- Winston, Elliott Herbert—1946
- Wright, Robt. Harrison—1951

American Viscose Expands College Program

Five more institutions will be included in the college relations program of American Viscose Corp. for the academic year 1955-56 than in 1954-55. The new total is 34 and reflects Avisco's continued interest in encouraging advanced education for the youth of America.

Nineteen fellowships, given for graduate work, have been established in the fields of chemistry, accounting, chemical engineering and pulp technology. Nineteen scholarships, awarded primarily to undergraduates entering their junior year, are divided among chemistry, engineering, physics, textiles, accounting, chemical engineering, business administration, textile technology and mechanical engineering.

American Viscose's college program is designed to encourage the study of science, engineering and business administration. Actual selection of recipients is left to the faculty of each institution and the individuals selected are under no obligation of any kind to the corporation.

Located in 14 states and Canada, the following institutions have been invited to take part in the program this year: Akron University, Allegheny College, Bucknell University, Carnegie Institute of Technology, Case Institute, Clemson Agricultural College, Cornell University, Duke University, Georgia Institute of Technology, Jefferson Medical College, Lehigh University, Lowell Technological Institute, Massachusetts Institute of Technology, McGill University, Michigan State College, New York State College of Forestry at Syracuse, N. Y., North Carolina State College, Northwestern University, Ohio State University, Pennsylvania State University, Philadelphia Textile Institute, Princeton Textile Research Institute, Purdue University, Roanoke College, Swarthmore College, Texas State College for Women, University of Delaware, University of Maine, University of North Carolina, University of Pennsylvania, University of Rochester, Virginia Polytechnic Institute, West Virginia University and Yale University.

Huffines Expresses Faith In Diversification

Continued expansion into diversified fields is the plan of Textron American Inc., according to Robert L. Huffines Jr., president of Textron American and Amerotron Corp. Mr. Huffines, addressing the Greater Charlotte (N. C.) Textile Club recently, reported that his company has several non-textile businesses under consideration for acquisition in its plan to develop operations into a 50-50 blending of textile and non-textile activities. He pointed out that Textron American currently has a sales volume in the ratio of \$150 million in textiles to \$50 million in non-textiles. "We hope to increase the non-textiles another \$100 million," he said. "We're bringing our operations up to a 50-50 basis as rapidly as possible." From the standpoint of the investing public, he said he believed that diversification was a sound solution to some of the problems of the textile industry.

Dwelling briefly on the merger of American Woolen, Robbins Mills and Textron Inc. into Textron American, Mr. Huffines said that the merger has brought together the craftsmanship, heritage, fine plant facilities and good management of the three companies. These qualities plus "know-how" will prove the merger a successful move, he said.

In the field of merchandising, Mr. Huffines urged a break away from tradition and procedures of the past, and humor-

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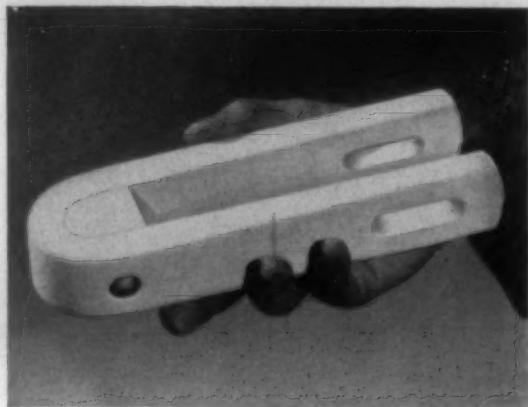
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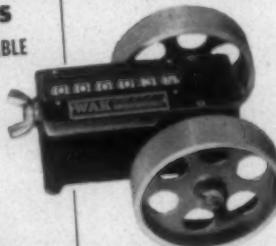
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ously mentioned the possibility of trading in an old suit for a new one, such as in the automobile industry. He predicted a tremendous expansion in the use of wash and wear fabrics, and said these fabrics would include some with a feel almost indistinguishable from worsted fabrics. A new silicone finish and a new Vicara-Orlon acrylic fiber blend were suggested as the type of progress needed in the industry.

N. C. Cotton Buyers And Classers Hold Meet

The first annual meeting of the Cotton Buyers and Classers Division of the North Carolina Textile Manufacturers Association was held at the Hollywood Hotel, Southern Pines, N. C., May 6-7. Featured speakers at the meeting were George W. Pfeiffenberger, National Cotton Council of America, Memphis, Tenn., who addressed the first session, and L. W. Bishop, senior vice-president of Wachovia Bank & Trust Co., Charlotte, N. C., and former director of the South Carolina Development Board, who appeared as the dinner speaker.

In an election of officers, Stiles D. Fifield, director of raw materials purchases, Fieldcrest Mills Inc., Spray, was named chairman of the division, succeeding Arthur H. Fuller, Textiles Inc., Gastonia. George Bruton, Wilson Sales Corp., Gastonia, was elected vice-chairman and the following were named to the executive committee: (for one year) Walter S. Covington, W. T. Covington & Co., Rockingham, and P. M. Neisler, Neisler Mills, Kings Mountain; (for two years) D. B. Johnston, Shuford Mills, Hickory, and W. J. Richards, Cannon Mills Co., Kannapolis; (for three years) Sydney Blum, Cone Mills Corp., Greensboro, and B. O. Creekmore, Erwin Mills, Durham.

Catawba Safety Council Holds Meet

The Catawba Safety Council held its regular quarterly meeting recently at the Clover (S. C.) High School. Guest speaker at the meeting was P. W. Logan, Southern manager, loss prevention department, The Liberty Mutual Insurance Co., who spoke on "Selling Safety To Others." In an election of officers following Mr. Logan's address, C. F. Grant Sr., overseer of spinning, Highland Park Mfg. Co., Mill No. 2, Rock Hill, S. C., was elected chairman; John Prievette, overseer of spinning, Hampton Yarn Division, American Thread Co., Clover, vice-chairman; and Sgt. James E. Street, safety officer, Police Department, Rock Hill, secretary and treasurer. American Thread Co., Clover, was host for the meeting and served light refreshments in the school cafeteria following the meeting. The next meeting of the council will be held in August.

Delta Kappa Phis Hear Research Discussed

At the recent annual meeting of the Delta Kappa Phi fraternity at Lowell (Mass.) Technological Institute, Dr. Walter J. Hamburger, director of Fabric Research Laboratories Inc., Boston, Mass., pointed out that more and more corporations are turning to outside textile research laboratories to improve their products and to create new ones. "Group research," he pointed out, "is the only logical answer to the already and constantly increasing complexity of modern technology." He explained that research in the past ten years had created great new industrial diversification in all industries, and the textile industry is no exception.

"The textile industry now finds itself using many new and

unfamiliar raw materials," he said, "and these new materials pose problems for the textile manufacturer which neither he nor his suppliers can answer." It is completely unsound in many cases for any company to maintain a research staff and facilities sufficient to assimilate all the new findings and cope with the profusion of problems which have been developed in the past decade, he told the meeting. For this reason, many large and small companies are seeking special service and information outside of their own organizations, he noted.

National officers elected at a business meeting of the fraternity included Thomas Scott of the William Carter Co., Needham, Mass., supreme consul; Harry E. Meunier, Texas Oil Co., Charlotte, N. C., supreme proconsul; Kenneth Dean of the Arnold, Hoffman Co., Providence, R. I., supreme annotator; and Frank Chase, also of Arnold, Hoffman, supreme custodian. Delegates voted to hold next year's convention at Atlanta, Ga., with the Theta Chapter as host.

Narrow Fabrics Mfrs. Elect Officers

Russell J. Neff, Phoenix Trimming Co., Chicago, Ill., has been elected president of the Association of Narrow Fabrics Manufacturers, succeeding William Lowndes Jr., Southern Weaving Co., Greenville, S. C., who has been made chairman of the board. The association held its fifth annual meeting in the Warwick Hotel, Philadelphia, Pa., recently. Others elected included Arthur R. Hutchinson, J. Sullivan & Sons Mfg. Corp., re-elected secretary and new treasurer, and Frank E. Slack, managing director. Mr. Hutchinson succeeds Amos Smith, formerly of Russell Mfg. Co., Middletown, Conn., as treasurer.

New directors elected for two years were Samuel Reid, Industrial Tape Mills; Walter Conley, Burlington Industries; Ernest R. Dayton, Russell Mfg. Co.; John Deangelis, Murdock Webbing Co.; and Mr. Neff, the new president. Mr. Neff reported at the meeting that committees would be formed to discuss and formulate proposals on formal standards on zipper tape, electrical tape and government specifications on webbing. Ideas conceived by the committees will be presented to the U. S. Bureau of Standards.

Chemical Progress Week Hails New Fibers

Synthetic fibers, antibiotics and synthetic plastics rank at the top of the most useful chemical developments of the last 35 years from a consumer's point of view. That's the word of a panel of nine experts, distinguished in the fields of science, education and publishing, who were asked to make the selection to mark Chemical Progress Week, May 16 to 21. The results of their survey appear in the May-June issue of *Better Living*, the Du Pont employee magazine.

In all, 27 developments were singled out by the panel. Of these 27, synthetic fibers, antibiotics and synthetic plastics won the votes of all nine of its members. Included in

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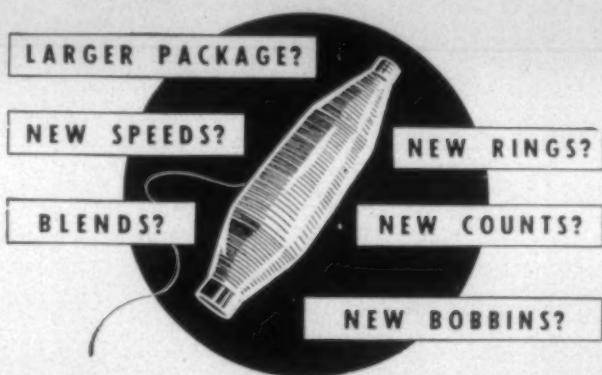
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the list of developments of significance to the consumer selected by the panel are: synthetic rubber, for automobile tires and other products, which now accounts for more than one-half of U. S. rubber consumption; synthetic insecticides, which destroy pests and raise farm output; radioactive isotopes, born of atomic research, which are invaluable tracer tools for medical and agricultural research; and packaging films, like cellophane, which have reduced spoilage, lowered costs and spurred development of the self-service store.

The chemical industry itself has grown tremendously in the last 35 years, *Better Living* points out, from an industry employing 300,000 people and producing \$4.5 billion worth of goods in 1920 to one employing 800,000 people and producing \$20 billion worth of goods today. "The chemical industry has long nurtured the spirit of change," the magazine says, and "now spends over \$200 million a year for research. To the consumer, the industry's giant steps have brought an ever-increasing flow of improved products at lower prices. For the employee they resulted in a constantly growing industry with a resulting pattern of new jobs, new opportunities and increased earnings."

Among the "giant steps" of the last 35 years to which the chemical industry has contributed are chemicals and chemical products such as synthetic fibers, fast dyes and special finishes which have added variety, style, comfort, low cost and convenience to the nation's wardrobe. Chemical products also have had a tremendous impact on the home, through pigments and dyes, which brighten everything from walls to rugs.

Piedmont A.A.T.C.C. Holds Spring Meeting

The Piedmont Section of the American Association of Textile Chemists & Colorists held its annual Spring meeting April 30 at the Robert E. Lee Hotel, Winston-Salem, N. C. Papers delivered at the meeting included "Dyeing and Finishing of Elastic-Type Nylon Hosiery" by J. Vaughan Boone, Geigy Dyestuffs Division, Geigy Chemical Corp.; and "An Improved Process for Dyeing Nylon Tricot with Acid Dyes" by Joseph A. Brooks, textile fibers department, E. I. du Pont de Nemours & Co. Inc., Wilmington, Del. John Hardin, vice-president in charge of public relations for Burlington Industries, appeared as the after-dinner speaker. The section will hold its annual outing June 10-12 at the Mayview Manor, Blowing Rock, N. C.

New Fabric Program Announced By Avisco

A program of fabric promotion and merchandising is being established by American Viscose Corp. Under the program, fabrics made of rayon and acetate as well as blended fabrics with natural and the newer synthetic fibers will be specially created by the corporation's fabric development department and will be shown to designers, converters and retailers. These fabrics will be known as Avisco Originals and will be widely publicized to the consumer and retailer. Garments made from them will carry special identification in the form of medallion tags.

Walter E. Scholer, manager of the Avisco fabric development department, is supervising the design and the manufacture of the custom-loomed yardage. Miss Ann Kissel has been retained as a consultant to the department and the finished goods under the program will be distributed by Ann Kissel Associates, 411 Fifth Avenue, New York City.

Included in Avisco Originals are fabrics developed to

carry out the fashion ideas of converters, designers and retail store buyers. Any fabric accepted will be reserved for the exclusive use of the designers for one season. Arrangements for manufacturing and finishing will be made with specialty houses and Avisco's textile research department.

Officers Elected At Annual Phi Psi Meet

Willard A. Colby Jr., president of Emery Industries Inc., Cincinnati, Ohio, was elected Grand Council president of Phi Psi Fraternity at the group's recent 52nd annual convention held at the Hotel Beaconsfield, Brookline, Mass. Mr. Colby succeeds Walter Fancourt of W. F. Fancourt & Co., Philadelphia, Pa. Succeeding Mr. Colby as vice-president is George F. Long, assistant sales manager of Harchem Div., Wallace & Tiernan Inc., Belleville, N. J. Mortimer T. Farley of Taylor, Symonds Co., Boston, Mass., continues as treasurer. Mr. Fancourt, the retiring president, was presented with a cup of fraternal esteem in absentia by Richard S. Cox, dean emeritus of Philadelphia Textile Institute. Mr. Fancourt was unable to attend the meeting due to illness.

Industry Spokesmen Express World Trade Views

World trade policies of the State Department are continuing to take a beating from textile industry spokesmen. One particularly vehement broadside was recently fired by J. Craig Smith, president and treasurer of Avondale Mills, Sylacauga, Ala., and immediate past president of the American Cotton Manufacturers Institute. Mr. Smith charged the president of the Committee for a National Trade Policy with misrepresenting the facts relative to the textile industry and U. S. tariffs in an address by the latter at Charlottesville, Va.

In a letter to Charles P. Taft, the committee president, Mr. Smith said that Mr. Taft's appraisal of textiles and the tariff was "a succession of unrelated and irrelevant assertions, an odd mixture of error and half-truths and an assortment of diatribes against those industries and individuals who are still possessed of economic sanity and social responsibility." He charged Mr. Taft with having a direct financial interest in lower tariffs, saying that he was reliably informed that "you are a registered lobbyist and that you either are or have recently been on the pay roll of foreign oil interests." He went on to say that: "An enlightened trade policy should seek to expand the outward flow of cotton goods from this area of the world's greatest supply to the areas of scarcity where they are needed. The policy you advocate is just the reverse. It would turn excess production of Japan into the already over-supplied market of the U. S. This is without sense. Its only consequence would be to rack up another tragedy of human stupidity."

Speaking before the Fayetteville, N. C., Rotary Club, F. S. Sadler, secretary-treasurer of the A.C.M.I., pointed out that, even without current threats of another or fourth round of tariff slashes, the No. 1 problem of the textile industry is how to cope now and in the future with a rising tide of imports from low-wage foreign countries, principally Japan. He told the Rotarians that there are three phases or "prongs" to the dilemma of textiles: (1) the so-called tariff bill, H. R. 1; (2) the alarming increase in imports; and (3) the threat of further tariff cuts under G.A.T.T. (General Agreement on Tariffs and Trade) now under negotiation at Geneva, Switzerland.

George E. Glenn Jr., president of Exposition Cotton



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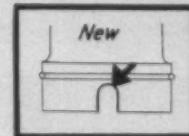
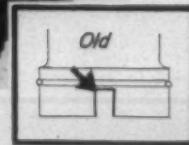
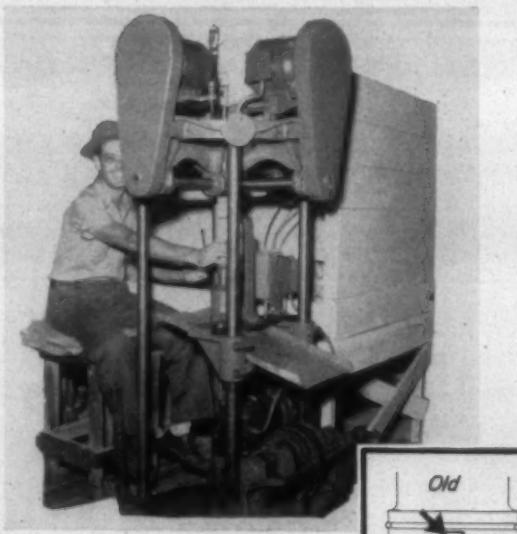
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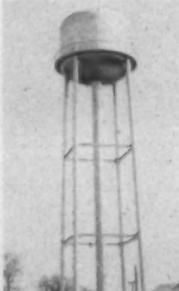
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Mills Co., Atlanta, Ga., recently pointed out to a meeting of the Textile Operating Executives of Georgia that items selected for tariff negotiations between the U. S. and other countries were "not the major products of this country's industrial giants," but were "primarily the products which affect the livelihood of the little fellow."

"Almost without exception," he said, "those industry spokesmen who were on record as having most loudly urged a cut in tariffs were those who represented other industries which had plants or facilities abroad, or which were protected by patents or special machines or freight rates, and thus had a measure of protection against the influx of foreign goods made with cheap labor." The nation's over-all economy, he warned, is closely linked to that of textiles, and a slump or boom in the textile industry could have a definite and quick effect on the financial positions of many other important enterprises.

A "positive program" to stimulate international trade and, at the same time, bolster the world's under-developed areas was proposed before the Mississippi Valley Foreign Trade Conference at New Orleans, La., by R. H. Jewell, vice-president of Crystal Springs Bleachery, Chickamauga, Ga. Pointing out that world trade ills cannot be cured by principle manufacturing countries unloading their surpluses on one another, Mr. Jewell proposed that help be given such countries as Japan to help them regain their natural markets. Living standards, he said, must be raised in the underdeveloped areas of the world so that they can be added to the list of textile consuming countries. If this could be done, he said, surpluses of raw cotton and textiles would soon disappear. Yet these same countries have barred trade by their import quotas, currency manipulations, exchange allocations and other artificial restraints, he noted. This is the problem that should be tackled, he said, rather than singling out the textile industry "for sacrifice under a program which would not achieve the ends for which it was intended."

Survey Shows Consumers Want Colorfastness

Colorfastness is the most important question in the minds of consumers when buying soft goods, a nationwide trade survey recently completed by American Cyanamid Co. reveals.

Asked, "What questions do consumers ask first when buying soft goods," store buyers and merchandise managers checked, "Will it fade?" as the most frequent (29.64 per cent), even ahead of "What is it made of?" (28.56 per cent), or "How much does it cost?" (26.64 per cent). Less than ten per cent checked, "Who manufactures it?" (9.67 per cent).

"A number of other revelations were made in answer to the questionnaire, sent to over 33 000 buyers and merchandise managers in U.S. department and specialty stores," J. L. Naylor, manager of American Cyanamid's dyestuffs department said in releasing the survey returns. "Our response of approximately ten per cent was very gratifying, especially in view of the depth of many of the questions asked. It makes our survey, as far as we know, the most comprehensive of its kind ever made on color problems at the retail level. We feel we now have a new and accurate picture of prevailing attitudes and understanding about dyes among retailers and the general public."

How serious a problem color failure is, to stores, is disclosed in the returns showing color fading, running or rubbing off brings merchandise returns to over 83 per cent of

the stores reporting. It is revealed that the degree of this problem varies in specific merchandise categories. Among the worst areas are curtains, draperies and upholstery, say 38.64 per cent of store respondents; dresses, 39 per cent; blouses, skirts, sportswear, 31 per cent; knitwear, 27.5 per cent; slip covers, bedspreads, 27 per cent; sport shirts, 23.6 per cent corduroy products, 20 per cent; pajamas, 18 per cent.

Indicating store headaches due to color failure in piece goods was the heavy response on recurring returns in the four fabric classifications listed: rayon, 34.7 per cent; cotton, 25.5 per cent; synthetics, 21.8 per cent; blends, 18.4 per cent. Retail stores bear the brunt of consumer ill-will in cases of color failure, say three out of four retailers. Although "manufacturer" was checked by most of the balance, there was a write-in vote of "both" (store and manufacturer) by 12.17 per cent of respondents.

The question that was answered by 100 per cent of the respondents dealt with vat-dyed identification by manufacturers. All want the manufacturer of merchandise made of vat-dyed or vat-printed fabrics to state that the fabrics use vat colors in his advertising, tags, mats for store advertising and display material. An overwhelming percentage of retailers, the survey shows, feel that an extensive public and trade education program on vat dyes would help both store and customer.

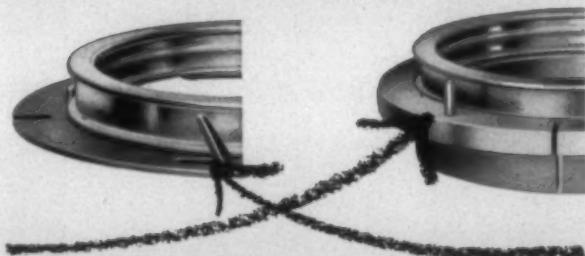
"Perhaps most interesting to us," declared Mr. Naylor, "was the response to the question on the justification for a slightly higher retail price on vat-dyed merchandise. More than 95 per cent of the buyers and merchandise managers queried felt the colorfastness feature important enough to justify the difference in price. Less than five per cent checked "No."

"Since it has been reported to us repeatedly that mills and cutters can't get the slight extra price required for vat-dyed or vat-printed merchandise, retailer response to this particular question has special significance. Although American Cyanamid, a leading producer of vat dyes, direct dyes and pigments for cotton, viscose rayons and linens, has long felt the preference trend toward vat dyes, this current survey leads us to believe that the trend will be accelerated with the obviously growing demand on the part of both retailers and consumers for colorfastness," Mr. Naylor concluded.

Cranston's Dri-Smooth Finish For Cottons

Cranston Print Works Co. has unveiled a new cotton finish which virtually eliminates the need for ironing. Called

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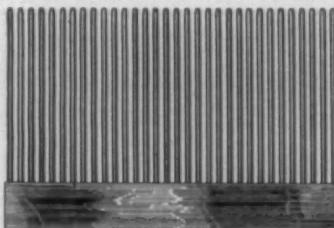
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Dri-Smooth, it was introduced to the trade at a fashion presentation and wash-and-wear demonstration employing both a standard home laundry washer and companion dryer to demonstrate the properties of the new finish.

Developed principally for 80x80 4.00 carded print cloths, the physical properties of the new finish, described as a resin chemical finish, are an improvement on those of Cranston's Fresh-Tex finish in shrinkage and crease resistance, T.W.D. Schafer, sales manager, stated. He added, however, that Dri-Smooth, which makes a cotton dress, skirt or pajamas wearable immediately after washing and drying, represents a goal in cotton finishing which Cranston has been aiming towards since it began processing goods in 1825.

Edward Lawrence, research director, pointed out that laboratory tests have been run on the basis of ten or more washings and dryings, with the results compared to identical cotton garments given only a regular mill finish. "The difference between the multitude of wrinkles left in the untreated garment after washing and drying and the almost 'freshly pressed' look of the Dri-Smooth treated garment is just about unbelievable," Mr. Lawrence states.

Also, an added feature discovered in the testing, was the speeded-up drying time on the treated fabrics. Dri-Smooth finished cottons dried twice as fast as the untreated fabric. Other important performance properties achieved through the new Dri-Smooth finish include shrinkage of not more than two per cent, the elimination of any need for starch, mildew resistance and the creation of generally faster, easier washing.

The Cranston executive added laboratory tests reveal that it is possible to use the new finish on a wide variety of cottons with as high a count or higher than 80-square. He said seven or eight print numbers, both white and dyed ground prints, are currently being finished with Dri-Smooth at the Cranston, R. I., Webster, Mass., and Fletcher, N. C., plants.

Silicone Finishing Of Woolens Increases

Silicone finishes designed to keep wool first among fibers made substantial progress in 1954, Dr. W. R. Collings, president of Dow Corning Corp., states in his latest progress report, entitled, "Silicones and Wool."

As an example, Dr. Collings cited Dow Corning 105 finish for woolens and worsteds. This finish was used initially to increase the spot and stain resistance and to give better shape retention. Now, however, many of the leading manufacturers of slacks and other woolen apparel are using fabric finished with Dow Corning 105 because of the hand it imparts.

An outstanding accomplishment, Dr. Collings said, was the introduction and rapid acceptance of Sylmer, a special Dow Corning finish that makes modern upholstery fabrics more practical because it simplifies the removal of spots and stains. Because the National Home Fashions League found Sylmer to be a "genuine departure in the design and styling of contemporary home furnishings and a substantial contribution toward the advancement of the industry as a whole," Dow Corning was recently awarded the 1955 "Trail Blazer Award" for finishes and finishing materials.

Two new Dow Corning silicone textile finishes are now in the final stages of laboratory tests and experimental mill runs. They are a combination silicone-moth-repellent finish and a wool shrinkage control process, both durable enough to withstand repeated washings or dry cleanings.

Dow Corning has for two or three years been trying to

find a way to fix a moth-repellent in woolens and worsteds by combining it with one of its silicone textile finishes, Dr. Collings states. "Silicones themselves are not moth-repellent," he says, "but tests now in progress in our laboratories and in mill runs indicate that mothproofers can be rendered durable to both washing and dry cleaning when applied simultaneously with Dow Corning 105, the basic silicone finish which we introduced about a year ago."

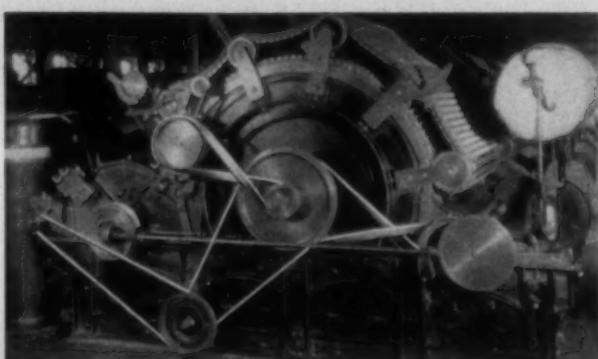
The two new products are applied, dried and cured in a single treatment with all of the desirable characteristics of the silicone finish retained. The shrinkage control silicone treatment, which also preserves the desirable characteristics of hand, wrinkle-resistance, water-repellency, spot and stain-resistance, etc., reduces shrinkage after repeated laundering to a value in the range of 2.5 to five per cent compared with about 20 per cent for untreated fabrics of the same construction, the Dow Corning report states. "Our shrinkage control process uses a different silicone emulsion than 105, but it is applied, dried and cured in the same general way as our other finishes," Dr. Collings says, adding "We expect that this new silicone process will be just as important to the industry as our Dow Corning 105 and Sylmer upholstery finishes."

He pointed out that mill trials to date have been made with 100 per cent wool blanket fabrics, but encouraging laboratory results have also been reported on some all-wool shirtings, skirtings and slack-type goods.

Bigger Beds For Bigger Americans

The people who make beds, mattresses, sheets, box springs and other sleeping gear are convinced that what the average American needs, for greater sleeping comfort, is more space. So this month they yanked the counterpane off a big promotion that's been in the works for months—supersize bedding. According to the old-line factoring firm of William Iselin & Co. Inc., the ordinary old-fashioned bed runs about six feet two inches long. The length of the new long bed has been set by the Bureau of Standards at six feet ten and one-half inches.

Why that size? The bureau—along with insurance companies and other organizations which maintain such statistics—is aware that Americans, both men and women, constantly have been growing taller. There are half again as many American men now five feet ten or taller, as there were in 1918.



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Worth Street Celebrates Its Beginning

New York City's Worth Street, named May 16, 1855, in honor of Maj.-Gen. William Jenkins Worth who won fame in the Mexican War of 1846, and center for 90 years of the nation's marketplace for the products of mills from Maine to Texas, this month observed its centennial birthday with ceremonies conducted under auspices of the Worth Street Historical Society at 40 Worth Street.

Hon. Robert F. Wagner, mayor of New York, proclaimed the centennial and reaffirmed the act of the Hon. Fernando Wood, mayor in 1855, who on May 16 of that year signed a bill to rename Anthony Street as Worth Street, as passed by the aldermen and councilmen in response to a petition of 21 citizens headed by L. G. Morris.

Frank L. Walton, president of the society and well-known historian, opened the meeting and Marvin R. Cross of Greenwood Mills Inc., presided for the occasion. John M. Reeves of Reeves Brothers Inc., called attention to the flag of the society and to Worth Street being perhaps one of the only streets having a flag, an historical society, and certainly so long and distinguished a textile background.

James A. Kelly, deputy city clerk of Kings County and borough historian of Brooklyn, spoke on ancient relics recovered in the excavation of the subway at Worth and Lafayette Streets which originally was the site of old Collect Pond. Lynn McCracken, custodian of the John Peter Zenger Memorial, spoke on General Worth, who gave his name alike to Worth Street, Fort Worth, Tex., and Lake Worth, Fla.

Loring McMillen, president of the Staten Island Historical Society, cited records showing that when the Indians sold the island to the Dutch they were compensated mainly in textiles, and Mr. Walton noted growing evidence that Manhattan Island was sold for \$24 worth, not of "beads and trinkets," but probably in great part for cloth. Arthur Carlson of the New York Historical Society also addressed the gathering.

At an ensuing luncheon for trustees and guests of the society held at the Arkwright Club of the City of New York, Frank Leslie of Leslie & Co., trustee of the society, described the traditions and events of the textile marketplace in Worth Street over past years, and William P. Wright Jr., of Greenwood Mills, representing Worth Street Inc., presented a prospectus of present-day Worth Street, alike as a great center of textile marketing and as an influence for the advancement of the textile industry wherever located.

Fraser Heads A.C.T.M. Financial Group

"The old order always changes and yields place to new. This adage is particularly descriptive of the textile industry and textile merchandising over recent years." Thus observed Frank H. Leslie of Leslie & Co., cotton goods merchants of New York City, last month when speaking at the annual

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forum and dinner of the Financial Group of The Association of Cotton Textile Merchants of New York.

"But," continued Mr. Leslie, "there are effective techniques and market instruments that are tried and true. The values of the Standard Cotton Textile Salesnote and the Worth Street Rules remain a constant credit to textile trade co-operation between buyers and sellers. The General Arbitration Council of the Textile Industry has long since become our recognized agency for the settlement of contractual dispute. Now 25 years old, it can look forward to a future of increasing service and responsibility. So with your specialized group which has continued to grow in stature and numbers since its inception in 1934. Nothing in our business life is more truly American than intelligent co-operation between market competitors to preserve the fundamentals of right and equity. Your readiness to challenge the encroachment of New York City taxation upon interstate commerce justifies the confidence which the market places in you and the successful outcome of your suit proves your worth as an effective agency in the removal of trade barriers."

Lewis M. Heflin, president of Cone Mills Inc. and chairman of the Financial Group, presided. At the meeting Kenneth W. Fraser, vice-president and treasurer of J. P. Stevens & Co. Inc., was chosen to head the group for the new year.

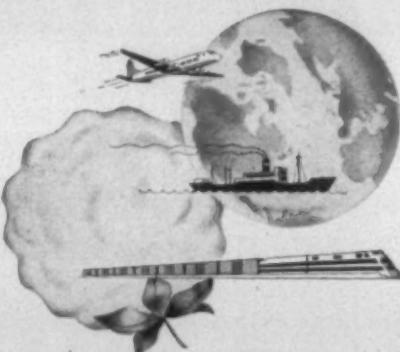
The meeting of some 150 treasurers, comptrollers and other officers of New York textile firms paid particular tribute to Joseph W. Valentine of J. W. Valentine Co. Inc., Walter Williams of Virginia Mills Inc., Swepsonville, N. C., and Attorney Paul Peyton of Breed, Abbott & Morgan, for their work in connection with the Financial Group's successful test case of the New York City gross receipts tax, known as the Virginia Mills case. The three were special guests of the occasion.

Chattanooga Yarn Assn. Sets Outing Dates

The Chattanooga Yarn Association will hold its 1955 outing at the Lookout Mountain Hotel, Sept. 29 and 30. Committees named for the outing include: Initiation—R. W. Boyd, Leon-Ferenbach Inc., chairman, and Harry Anderson, U. S. Rubber Co.; Golf—R. H. Griffith, Duplan Corp., chairman, Pete Morrow, Dixie Mercerizing Co., and Fred Johnston, The Johnston-Windle Co.; Skeet—George Bailey, Avondale Mills, chairman, H. O. Shuptrine, American Viscose Corp., and R. D. McDonald, Southern Mercerizing Co.; Prizes—Hubert Fry, chairman, David Gott, C. D. Gott Co., and Bill Lowery, E. I. du Pont de Nemours & Co. Inc.; Floor Show—Jop Rickman, Standard-Coosa-Thatcher Co., chairman, and Harvey Davenport, American & Efird Mills; Hotel and Refreshments—Peter Branton, Avondale Mills, chairman, Bud Johnston, Textiles Inc., and Henry Crumbliss; Handicap—Robert Mebane, Duplan Corp., chairman, and Dixie Howell, American Thread Co.

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Box "V. T." care Textile Bulletin
P. O. Box 1225, Charlotte 1, N. C.

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Reply to Box "V. R." care Textile Bulletin
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WANTED—Job as second hand in spinning department. Can overhaul or erect. Available to begin work at once. 30 years' experience in spinning. A-1 references. Write to Box "W. D." care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

SUPERINTENDENT AVAILABLE. Experienced in carding and spinning, synthetic, combed and carded yarns. Formerly superintendent of large Southern mill. I. C. S. graduate; age 46; excellent references. Reply to Box "T. R." care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

WANTED—Position as general overseer of cloth room or sewing room. Experienced on rayons and cottons. A total of 15 years' experience. Can furnish references. Write to Box "D. S." care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

FOR SALE—Ideal industrial sites adjoining city limits of Concord, N. C. 1,000 feet railroad frontage near junction of 29 and 29A highway. Up to 30 acres available. Reply to W. L. Ezell, 205 Cabarrus Bank Building, Concord, N. C.

WANTED—Position as General Overseer or Plant Superintendent of yarn, twine or weaving mill. Experienced on cotton, waste and rayon, tube twists and laundry textiles. Presently employed; sober; high school education; age 47. Address Box "W. G." care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

WANTED—Position as Overseer or Second Hand in spinning department. 43 years of age. I. C. S. graduate, high school education. 25 years' experience in spinning department with six of these years as supervisor. Good references. Sober and hard working. Write or wire "Spinner," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

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At Blowing Rock Next Month

1955 S. T. A. Convention Program

THURSDAY, JUNE 16

- 2:30 to 5:30 P. M.—Registration, Mayview Manor lobby.
6:30 to 7:30 P. M.—Social hour, Mayview Manor ballroom; courtesy of Associate Members Division.
7:00 P. M.—Buffet supper, Mayview Manor dining room.
9:00 P. M.—Millionaires' Party, Mayview Manor ballroom.
10:00 P. M.—Dancing, Mayview Manor ballroom.

FRIDAY, JUNE 17

- 8:30 A. M.—Breakfast meeting, Board of Governors, Hunt Room, Mayview Manor.
9:00 A. M.—Annual business meeting, Associate Members Division, Mayview Manor ballroom.
9:00 A. M.—Registration Mayview Manor lobby.
10:00 A. M.—First business session, Mayview Manor ballroom, President J. L. James presiding.
Invocation.
Announcement of nominating committee personnel.
Address, Dr. L. C. Hance, president of the Institute of Textile Technology, Charlottesville, Va.
Address, William F. Robertson, vice-president and general manager of Riegel Textile Corp., Ware Shoals, S. C.
1:00 P.M.—Golf tournament, Blowing Rock Country Club; W. S. Terrell in charge.
3:00 P. M.—Bingo contest, Mayview Manor ballroom; J. A. Chapman Jr. in charge.
6:30 to 7:30 P. M.—Social hour, Mayview Manor ballroom.
7:30 P. M.—Steak dinner, Mayview Manor dining room and terrace; ladies' favors will be distributed following meal.
9:00 P. M.—Floor show, Mayview Manor Ballroom; Announcement of golf prize winners.
10:00 P. M.—Dancing, Mayview Manor ballroom.

SATURDAY, JUNE 18

- 9:00 A. M.—Final registration, Mayview Manor lobby.
10:00 A. M.—Closing business session, Mayview Manor ballroom.
Remarks of the retiring president, Mr. James.
Address, A. K. Winget, chairman of the board, American & Efird Mills, and president of the American Cotton Manufacturers Institute.
Report from nominating committee; election of 1955-56 officers and four members of board of governors to serve three-year terms expiring in 1958.
Recognition of newly-elected officers and board members.
Presentation of gift to the retiring president.
Adjournment.

A N attendance of more than 400 mill operating executives, representatives of machinery, supply and service firms, and their wives, is expected during the annual convention of the Southern Textile Association next month in Blowing Rock, N. C. The convention, which is scheduled Thursday, Friday and Saturday, June 16, 17 and 18, will have the Mayview Manor as headquarters hotel and also will use the entire capacity of nearby Green Park Hotel.

Arthur K. Winget of Albemarle, N. C., will make his first address as 1955-56 president of the American Cotton Manufacturers Institute during the convention. Mr. Winget, who is chairman of the board of American & Efird Mills, will speak at the final session Saturday morning. At this session, J. L. James of Cooleemee, N. C., will present his report as retiring president of the S.T.A.

Speakers scheduled at the first business session Friday morning are Dr. L. C. Hance, president of the Institute of Textile Technology, Charlottesville, Va., and William F. Robertson, vice-president and general manager of the Ware Shoals (S. C.) Division of Riegel Textile Corp.

The 1955 convention program will start Thursday evening with a reception given by the S.T.A. Associate Members Division, which is made up of representatives of firms serving the textile industry. This will be followed by a buffet supper and entertainment. Recreation—golf at the Blowing Rock Country Club and bingo at Mayview—is scheduled Friday afternoon. Another reception will be given by the suppliers Friday evening, this to be followed by a steak dinner on the new Mayview Manor terrace, a floor show in the ballroom, and dancing.

The election of officers will be held at the final session Saturday. As a matter of custom and precedent, Mr. James is expected to be elevated to the position of chairman of the S.T.A. board of governors; James A. Chapman Jr. of Inman (S. C.) Mills, the current first vice-president, is expected to move up to president, succeeding Mr. James. The second vice-president, H. C. Estes

of Pacific Mills, Rhodhiss, N. C., is expected to be elected first vice-president, and a new second vice-president will be named to replace him. T. I. Stafford of Clifton (S. C.) Mfg. Co., president of the S.T.A. in 1953-54, is currently chairman of the board.

The terms of four members of the board of governors expire this year, and these places on the board are to be filled by election Saturday morning; the terms of new board members elected at that time will expire in 1958. Those whose terms are expiring this year include Howard Barton of Fieldcrest Mills, Spry, N. C.; J. P. Hughes of Cone Mills Corp., Hillsboro, N. C.; W. M. Pittendreigh of Riegel Textile Corp., Ware Shoals, S. C.; and J. B. Powell of Locke Cotton Mills Co., Concord, N. C.

New features at this year's Blowing Rock convention will include an outdoor, heated swimming pool at Mayview Manor, and shuttle bus service operating between Mayview and Green Park Hotel. The management of the two hotels is now in the process of confirming room reservations which were requested by members earlier this month.

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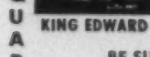
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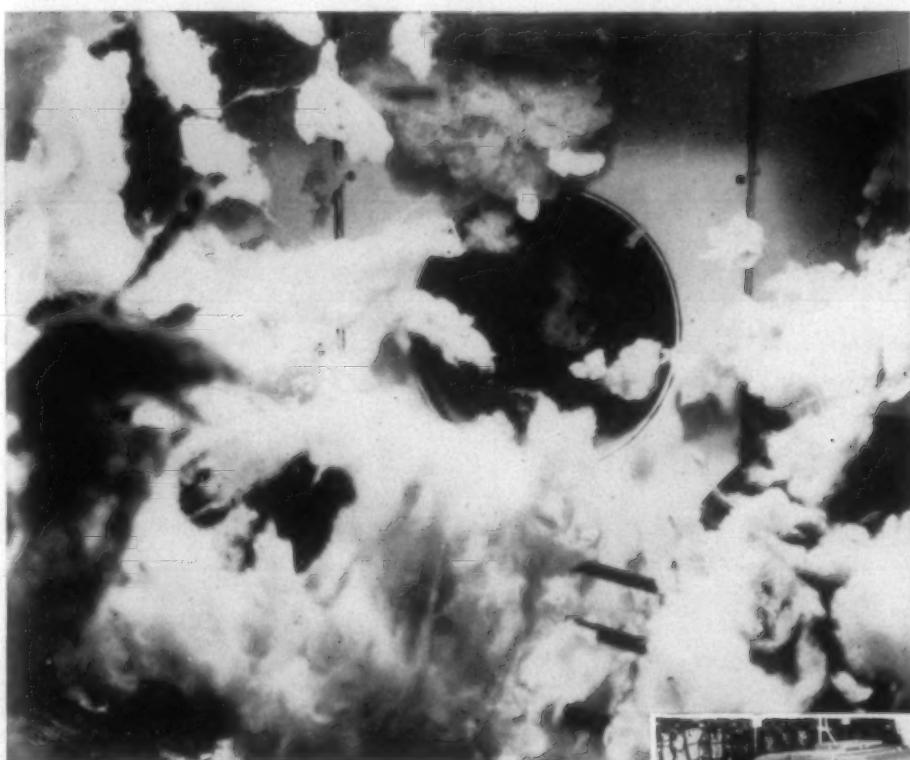
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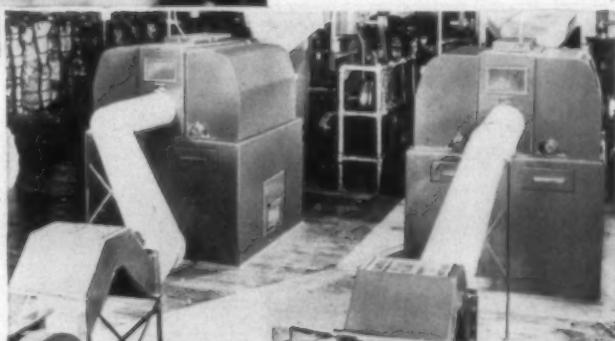
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